6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[EPA-HQ-OAR-2012-0319; FRL-9940-50-OAR]

RIN 2060-AR77

Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or Before October 14, 2010

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the federal plan for existing sewage sludge incineration (SSI) units. This final action implements the Environmental Protection Agency's (EPA) emission guidelines (EG) adopted on March 21, 2011, in states that do not have an approved state plan implementing the EG in place by the effective date of this federal plan. The federal plan will result in emissions reductions of certain pollutants from all affected units covered.

DATES: The effective date of this rule is [insert date 30 days from date of publication in the Federal Register]. The incorporation by reference (IBR) of certain publications listed in the rule is approved by the Director of the Federal Register as of [insert date 30 days from date of publication in the Federal Register].

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2012-0319. The EPA previously established a

docket for the March 21, 2011, original SSI new source performance standards (NSPS) and EG under Docket ID No. EPA-HQ-OAR-2009-0559. All documents in these dockets are listed on the World Wide Web (www), http://www.regulations.gov index Web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed in the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically at http://www.regulations.gov or in hard copy at the EPA Docket Center (EPA/DC), EPA WJC West Building, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Ms. Amy Hambrick, Fuels and Incineration Group, Sector Policies and Programs Division (E143-05), Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-0964; fax number: (919) 541-3470; email address: hambrick.amy@epa.gov.

SUPPLEMENTARY INFORMATION:

Acronyms and Abbreviations. The following acronyms and abbreviations are used in this document.

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ACI Activated Carbon Injection

AG Attorney General

ANSI American National Standards Institute

ASME American Society of Mechanical Engineers

ASTM American Society of Testing and Materials

BTU British Thermal Unit

CAA Clean Air Act

CBI Confidential Business Information

Cd Cadmium

CDX Central Data Exchange

CEDRI Compliance and Emissions Data Reporting Interface

CEMS Continuous Emissions Monitoring Systems

CFR Code of Federal Regulations

CO Carbon Monoxide

CPMS Continuous Parameter Monitoring Systems

EG Emission Guidelines

ERT Electronic Reporting Tool
ESP Electrostatic Precipitators

FB Fluidized Bed FF Fabric Filter

HCl Hydrogen Chloride

Hg Mercury

IBR Incorporation by Reference

ISTDMS Integrated Sorbent Trap Dioxin Monitoring System
ISTMMS Integrated Sorbent Trap Mercury Monitoring System

MH Multiple Hearth

NAICS North American Industrial Classification System

NESHAP National Emission Standards for Hazardous Air Pollutants

NO_x Nitrogen Oxides

NSPS New Source Performance Standards

NTTAA National Technology Transfer and Advancement Act of 1995

Pb Lead

PCDD/PCDF Polychlorinated Dibenzo-P-Dioxins and Polychlorinated

Dibenzofurans

PM Particulate Matter

PRA Paperwork Reduction Act

PS Performance Specifications RFA Regulatory Flexibility Act

SO₂ Sulfur Dioxide

SSI Sewage Sludge Incineration
TEF Toxicity Equivalence Factor

TEQ Toxicity Equivalence

The Court U.S. Court of Appeals for the District of Columbia Circuit

TMB Total Mass Basis

TPY Tons per Year

TTN Technology Transfer Network

UMRA Unfunded Mandates Reform Act of 1995

VCS Voluntary Consensus Standards

WWW World Wide Web

Organization of This Document. The following outline is provided to aid in locating information in this preamble.

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- G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
- H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use
- I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51
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- K. Congressional Review Act (CRA)

I. General Information

A. Does the final action apply to me?

Regulated Entities. Owners or operators of existing SSI units that are not already subject to an EPA-approved and effective state plan implementing the March 21, 2011, EG, may be regulated by this final action. Existing SSI units are those that commenced construction on or before October 14, 2010. Regulated categories and entities include those that operate SSI units. Although there is no specific North American Industry Classification System (NAICS) code for SSI units, these units may be operated by wastewater treatment facilities designed to treat domestic sewage sludge. The following NAICS codes could apply as shown in Table 1 below:

Table 1. Examples of Potentially Regulated Entities

Cohomon	NAICS	Examples of potentially	
Category	Code	regulated entities	
Solid waste	562213	Municipalities with SSI units	
combustors and			
incinerators			
Sewage	221320	Wastewater treatment	
treatment		facilities with SSI units	
facilities			

This table is not intended to be exhaustive, but rather provides a general guide for identifying entities likely to be affected by the final action. To determine whether a facility would be affected by this action, please examine the applicability criteria in 40 CFR 62.15855 through 62.15870 of subpart LLL being finalized here.

Questions regarding the applicability of this action to a particular entity should be directed to the person listed in the preceding FOR FURTHER INFORMATION CONTACT section.

B. Where can I get a copy of this document?

In addition to being available in the docket, an electronic copy of the final action is available on the Internet through the Technology Transfer Network (TTN) Web site. Following signature by the Administrator, the EPA will post a copy of this final action at http://www3.epa.gov/ttn/atw/129/ssi/ssipg.html. The TTN provides information and technology exchange in various areas of air pollution control. Additional information is also available at the same Web site.

C. Judicial Review

Under CAA section 307(b)(1), judicial review of this final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit (the Court) by [insert date 60 days from date of publication in the Federal Register].

II. Background Information

A. What is the regulatory development background for this final rule?

Section 129 of the CAA, titled, "Solid Waste Combustion," requires the EPA to develop and adopt standards for solid waste incineration units pursuant to CAA sections 111 and 129. On March 21, 2011, the EPA promulgated NSPS and EG for SSI units located at

wastewater treatment facilities designed to treat domestic sewage sludge. See 76 FR 15372. Codified at 40 CFR part 60, subparts LLLL and MMMM, respectively, these final rules set limits for nine pollutants under section 129 of the CAA: cadmium (Cd), carbon monoxide (CO), hydrogen chloride (HCl), lead (Pb), mercury (Hg), nitrogen oxides (NO $_{\rm X}$), particulate matter (PM), polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs), and sulfur dioxide (SO $_{\rm 2}$).

Sections 111(b) and 129(a) of the CAA address emissions from new units (i.e., NSPS), and CAA sections 111(d) and 129(b) address emissions from existing units (i.e., EG). The NSPS are federal regulations directly enforceable upon SSI units, and, under CAA section 129(f)(1), become effective 6 months after promulgation.

Unlike the NSPS, the EG provide direction for developing state plans; however, the EG are not themselves directly enforceable. The EG are implemented under an EPA approved state or tribal plan or EPA adopted federal plan that implements and enforces them, once the state, tribal, or federal plan has become effective.

Section 129(b)(2) of the CAA directs states with existing SSI unit(s) subject to the EG to submit plans to the EPA that implement and enforce the EG. The deadline for states to submit state plans to the EPA for review was March 21, 2012. Sections 111 and 129(b)(3) of the CAA and 40 CFR 60.27(c) and (d) require the EPA to develop,

¹ Several states did not submit plans to the EPA by this date.

implement and enforce a federal plan for SSI units in any state without an approvable state plan within 2 years after promulgation of the EG. This action finalizes the SSI federal plan.

On August 20, 2013, the Court remanded portions of the 2011 SSI rule for further explanation. National Ass'n. of Clean Water Agencies v. EPA, 734 F.3d 1115. The Court did not vacate the NSPS or EG, and, therefore, the requirements of the rules remain in place. The EPA intends to address the Court's remand in a future rulemaking. The federal plan is needed to implement the SSI rule in states without an approved state plan. EPA anticipates that facilities in approximately eighteen states and nine local air pollution control districts will need to rely on the SSI federal plan.

B. What is the purpose of this final rule?

Section 129 of the CAA calls upon states as the preferred implementers of the EG for existing SSI units. States with existing SSI units were to submit to the EPA within 1 year (by March 21, 2012) following promulgation of the EG state plans that are at least as protective as the EG. Sections 111 and 129 of the CAA and 40 CFR 60.27(c) and (d) require the EPA to develop, implement and enforce a federal plan within 2 years following promulgation of the EG for sources in states which have not submitted an approvable plan (by March 21, 2013). The EPA is finalizing the SSI federal plan now so that a promulgated federal plan will go into place for any such states, thus ensuring implementation and enforcement of the SSI EG.

States without any existing SSI units are directed to submit to the Administrator a letter of negative declaration certifying that there are no SSI units in the state. No plan is required for states that do not have any SSI units. SSI units located in states that mistakenly submit a letter of negative declaration would be subject to the federal plan until a state plan regulating those SSI units becomes approved. State plans that have been submitted to implement the March 21, 2011, EG, have either been approved or are currently undergoing EPA review. This action finalizes the SSI federal plan to implement the March 21, 2011, EG for those states that do not have an approved state plan in place by the effective date of this federal plan.

Incineration of sewage sludge causes the release of a wide array of air pollutants, some of which exist in the waste feed material and are released unchanged during combustion, and some of which are generated as a result of the combustion process itself.² The EPA estimated in the 2011 rule that once the state plans and federal plan become effective, a total emissions reduction of the regulated pollutants would occur as follows: Acid gases (i.e., HCl and SO₂), about 450 tons per year (TPY); PM about 58 TPY; non-Hg metals (i.e., Pb and Cd) about 1.7 TPY; and Hg about 4 pounds per year. The EPA also estimated that air pollution control devices installed to comply

 $^{^2}$ See 76 FR 51371-51375, 51396-51399 and 51399-51400 to reference the regulatory background, summary of final rule changes and impacts of the EG adopted on March 21, 2011.

with the 2011 rule would also effectively reduce emissions of pollutants such as 7-polycyclic aromatic hydrocarbons, chromium, manganese, nickel, and polychlorinated biphenyls.

C. What is the status of state plan submittals?

Sections 111(d) and 129(b)(3) of the CAA, 42 U.S.C. 7411(d) and 7429(b)(3), authorize and require the EPA to develop and implement a federal plan for SSI units located in states with no approved and effective state plan. Table 2 below lists states and territories that have an EPA-approved plan in effect on the date this final federal plan is signed by the EPA Administrator. Additionally, Table 2 lists states and local agencies that submitted negative declarations and or those which the EPA anticipates taking delegation of the federal plan.

Table 2. Status of State and Territory Plans

Status		States	
I.	EPA-Approved Implementation Plans	New York; Puerto Rico; Virginia; Michigan; Indiana; Missouri	
II.	Anticipated Negative Declarations to be Submitted to the EPA	Huntsville, Alabama; Jefferson County, Alabama; Florida; Jefferson County, Kentucky; Mississippi; Tennessee; Kansas Pima County, Arizona; Pinal County, Arizona; Hawaii; Washoe County, Nevada; American Samoa; Guam	
III.	Negative Declaration Submitted/EPA Approved	Maine; Vermont; Virgin Islands; District of Columbia; Delaware; Philadelphia County, Pennsylvania; West Virginia; Alabama; Kentucky; South Carolina; Arkansas; City of Albuquerque, New Mexico; New Mexico; Oklahoma; Texas; Nebraska; Colorado; Montana; North Dakota; South Dakota; Utah; Wyoming; Arizona; Idaho; Oregon	
IV.	Final Implementation	Georgia	

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	Plans Submitted to the EPA	
V.	Draft Implementation Plans Submitted to the EPA	Rhode Island
VI.	EPA has not received a draft or final implementation plan or negative declaration	Huntsville, Alabama; Jefferson County, Alabama; Florida; Jefferson County, Kentucky; Mississippi; North Carolina; Forsyth County, North Carolina; Mecklenburg County, North Carolina; Buncombe County, North Carolina; Tennessee; Iowa; Kansas; Pima County, Arizona; Pinal County, Arizona; California; Hawaii; Washoe County, Nevada; American Samoa; Guam; Washington
VII.	Anticipated to Accept Delegation of federal plan	Connecticut; Massachusetts; New Hampshire; New Jersey; Maryland; Pennsylvania; Allegheny County, Pennsylvania; Louisiana; Maricopa County, Arizona; Nevada; Clark County, Nevada; Alaska; Puget Sound Clean Air Agency; Northwest Clean Air Agency; Southwest Clear Air Agency
VIII.	Anticipated federal plan implementation by EPA	Illinois; Minnesota; Ohio; Wisconsin

As the EPA regional offices approve implementation plans, they will also, in the same action, amend the appropriate subpart of 40 CFR part 62 to codify their approvals. The EPA will maintain a list of implementation plan submittals and approvals on the TTN Air Toxics Web site at http://www3.epa.gov/ttn/atw/129/ssi/ssipg.html. The list will help SSI unit owners or operators determine whether their SSI units are affected by a state plan or the federal plan.

Sewage sludge incinerator owners and operators can also contact the EPA regional office for the state in which their SSI units are located to determine whether there is an approved and effective state plan in place. Table 3 lists the names, email addresses and telephone numbers of the EPA regional office contacts and the states and

territories that they cover.

Table 3. Regional Office Contacts

			States and
Region	Regional contact	Phone	territories
Region I	Patrick Bird	(617) 918-1287	Connecticut,
	bird.patrick@epa.gov		Massachusetts,
			Maine, New
			Hampshire, Rhode
			Island, Vermont
Region II	Phillip Ritz	(212) 637-4064	New York, New
	ritz.phillip@epa.gov		Jersey, Puerto
			Rico, Virgin
			Islands
Region III	Mike Gordon	(215) 814-2039	Virginia, Delaware,
	gordon.mike@epa.gov		District of
			Columbia, Maryland,
			Pennsylvania, West
			Virginia
Region IV	Stan Kukier	(404) 562-9046	Florida, Georgia,
	kukier.stan@epa.gov		North Carolina,
			Alabama, Kentucky,
			Mississippi, South
			Carolina, Tennessee
Region V	Margaret Sieffert	(312) 353-1151	Minnesota,
	sieffert.margaret@epa.gov		Wisconsin,
			Illinois, Indiana,
			Michigan, Ohio
Region VI	Steve Thompson	(214) 665-2769	Arkansas,
	thompson.steve@epa.gov		Louisiana, New
			Mexico, Oklahoma,
			Texas
Region VII	Lisa Hanlon	(913) 551-7599	Iowa, Kansas,
	hanlon.lisa@epa.gov		Missouri, Nebraska
Region VIII	Kendra Morrison	(303) 312-6145	Colorado, Montana,
	morrison.kendra@epa.gov		North Dakota, South

			States and
Region	Regional contact	Phone	territories
			Dakota, Utah,
			Wyoming
Region IX	Mark Sims	(415) 972-3965	Arizona,
	sims.mark@epa.gov		California, Hawaii,
			Nevada, American
			Samoa, Guam,
			Northern Mariana
			Islands
Region X	Katharine Owens	(206) 553-1023	Alaska, Washington
	owens.katharine@epa.gov		
	Madonna Narvaez	(206) 553-2117	Idaho, Oregon
	narvaez.madonna@epa.gov		

D. What are the elements of the SSI federal plan?

Sections 111(d) and 129 of the CAA, as amended, 42 U.S.C.

7411(d) and 7429(b)(2), require states to develop and implement state plans for SSI units to implement and enforce the promulgated EG.

Accordingly, subpart MMMM of 40 CFR part 60 requires states to submit state plans that include specified elements. Because this federal plan takes the place of state plans, where approved state plans are not effective, it includes the same essential elements: (1) identification of legal authority and mechanisms for implementation; (2) inventory of SSI units; (3) emissions inventory; (4) compliance schedules; (5) emissions limits and operating limits; (6) operator training and qualification; (7) testing, monitoring, recordkeeping

and reporting; (8) public hearing; and (9) progress reporting. See 40 CFR part 62, subpart LLL, and sections 111 and 129 of the CAA. Each element was discussed in detail as it relates to the federal plan in the preamble of the proposed rule (80 FR 23406). The EPA received a total of ten unique public comment letters. A summary of these comments and the EPA's responses is presented in section IV, "Summary of Changes Since Proposal and Response to Public Comments" of this preamble.

III. Affected Facilities

A. What is a sewage sludge incinerator?

The term "SSI" means any unit³ that combusts any amount of sewage sludge located at a wastewater treatment facility designed to treat domestic sewage sludge, as defined in 40 CFR part 62, subpart LLL. The affected facility is each individual SSI unit. The federal plan defines two subcategories for existing SSI units in 40 CFR 62.16045 of subpart LLL: Multiple hearth (MH) incinerators and fluidized bed (FB) incinerators.

³ An SSI unit is an enclosed device or devices using controlled flame combustion that burns sewage sludge for the purpose of reducing the volume of the sewage sludge by removing combustible matter. An SSI unit also includes, but is not limited to, the sewage sludge feed system, auxiliary fuel feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The SSI unit includes all ash handling systems connected to the bottom ash handling system. The combustion unit bottom ash system ends at the truck loading station or similar equipment that transfers the ash to final disposal. The SSI unit does not include air pollution control equipment or the stack. 40 CFR 62.16045.

The combustion of sewage sludge that is not burned in an SSI unit located at a wastewater treatment facility designed to treat domestic sewage sludge may be subject to other standards under the CAA.

B. Does the federal plan apply to me?

The federal plan would apply to the owner or operator of an existing SSI unit that was constructed on or before October 14, 2010, and that is not already regulated by an approved and effective state plan as of the effective date in this notice. The federal plan would apply to the SSI unit until the EPA approves a state plan that regulates the SSI unit and that state plan becomes effective. If the construction of an SSI unit began after October 14, 2010, or modification of an SSI unit began after September 21, 2011, it would be considered a new SSI unit and would be subject to the NSPS at 40 CFR part 60, subpart LLLL. The specific applicability of the federal plan is described in 40 CFR 62.15855 through 62.15870 of subpart LLL.

This action will not preclude states from submitting a state plan at a later time. If a state submits a plan after the promulgation of the SSI federal plan, the EPA will review and approve

⁴ The federal plan will become effective 30 days after final promulgation.

⁵ A state plan is effective on the date specified in the notice published in the **Federal Register** announcing the EPA's approval of the plan.

or disapprove the state plan. If the EPA approves a plan, then the SSI federal plan no longer applies to SSI units covered by the state plan. If an SSI unit was overlooked by a state and the state submitted a negative declaration letter, or if an individual SSI unit was not covered by an approved and effective state plan, the SSI unit would be subject to this federal plan.

<u>C. How do I determine if my SSI unit is covered by an approved and effective state plan?</u>

Part 62 of title 40 of the CFR identifies the status of approval and promulgation of CAA section 111(d) and CAA section 129(b) state plans for designated facilities in each state. However, 40 CFR part 62 is updated only once per year. Thus, if 40 CFR part 62 does not indicate that a state has an approved and effective plan, please contact the state environmental agency's air director or the EPA's regional office (see Table 3 in section II.C of this preamble) to determine if approval occurred since publication of the most recent version of 40 CFR part 62.

IV. Summary of Changes Since Proposal and Response to Public Comments

This rule will be finalized as proposed except where the EPA revised the regulatory text to make certain clarifications. After consideration of all the public comments received, in the response to

 $^{^6}$ An approved state plan is a plan developed by a state that the EPA has reviewed and approved based on the requirements in 40 CFR part 60, subpart B, to implement 40 CFR part 60, subpart MMMM.

public comments below, the EPA clarified the compliance date, operator training requirements, the federal plan delegation process, certain performance monitoring and testing provisions, status of state plan submittals, and the inventory of units. The EPA received a total of ten unique public comment letters on the proposed federal plan rulemaking. (Note, one letter was inadvertently duplicated and submitted to the docket.⁷) No public hearing was requested, and, therefore, none was held.

The EPA believes that it is critical to highlight that the final compliance date remains, as proposed, March 21, 2016. Commenters raised concerns that the two proposed pathways for compliance implied that the compliance date was longer than statutorily allowed.

Therefore, the EPA removed these pathways in the regulatory text to clarify the final compliance date.

Commenters raised numerous comments on the federal plan's monitoring and testing provisions, most of which the EPA did not propose to revise or otherwise solicit comment on in the proposed federal plan. Section 129 of the CAA requires the EPA to develop a federal plan to assure that existing units are in compliance with the EG. Many of the comments received on the proposed federal plan's monitoring and testing provisions recommended changes to the EG, which are outside the scope of this action. For that reason, we are

 $^{^7}$ Docket Identification Numbers EPA-HQ-OAR-2012-0319-0016 and EPA-HQ-OAR-2012-0319-0017 are the same comment.

not making these changes at this time in the federal plan. An example of these changes is adjusting the minimum percent of the maximum permitted capacity during testing, which is currently promulgated in the EG at 85-percent. In the April 27, 2015, federal plan proposal the EPA did solicit comment on a potential revision to this provision. 8 The EPA is not revising the minimum threshold provision in the federal plan, but will consider whether to do so in a future rulemaking action. With respect to all other comments addressing monitoring and testing provisions in the EG, those comments are outside the scope of this action. However, we do provide some clarifications of the requirements of the EG in response to those comments later in the preamble for this federal plan. We will consider making changes to the EG and federal plan to incorporate the suggested revisions in the future. In addition, many of the commenters' concerns may be addressed through the federal plan, which provides the EPA Administrator with the authority to approve alternate methods of demonstrating compliance as established under 40 CFR 60.8(b) and 60.13(i). SSI unit owners and operators who wish to petition the agency for an alternative method of demonstrating compliance should submit a request to the Regional Administrator with a copy sent to the appropriate state.

A full summary of the public comments and responses to the public comments is provided below in section IV.A. of this preamble.

⁸ See 80 FR 23404.

A. Summary of Public Comments and Responses

In this section, we provide the EPA's responses to all of the public comments received. All of the public comment letters received are located in the docket, which can be accessed by following the instructions outlined in the ADDRESSES section of this preamble.

1. Compliance Schedule

COMMENT: Several commenters (08, 11, 12, 14) point out that the proposed final compliance date of March 21, 2016, is contradictory to the schedules of the compliance pathways proposed in 40 CFR 62.15875 given that it is less than 1 year after the close of the public comment period. Commenters believe that the proposed compliance pathways are unclear and imply that the final compliance date could be after March 21, 2016. Specifically, the proposed 40 CFR 62.15875 outlined two compliance pathways. The first pathway was to achieve final compliance by 1 year from the date of publication of the final federal plan in the Federal Register. The second pathway was to achieve final compliance more than one year following the date of publication of the final federal plan in the Federal Register by meeting the increments of progress specified in Table 1 of the proposed rule (increment 1: submit final control plan 3 months from

⁹ All of the public comments received are identified in the memorandum titled, "Public Comments Received on the Proposed Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or Before October 14, 2010," located in the docket.

the date of publication of the final rule in the **Federal Register** and increment 2: final compliance by March 21, 2016). Commenters (08, 11, 12, 14) request that EPA clarify the final compliance date and the schedules in the compliance pathways.

Two commenters (11, 12) specifically request that the EPA revise 40 CFR 62.15875 as follows:

- One (1) year after publication of the final federal plan in the **Federal Register**, or
- For affected sources planning to comply more than one (1) year after the final federal plan, meeting increments of progress for submitting a final control plan within six (6) months after the final federal plan is published and final compliance by two (2) years after the publication of the final federal plan in the **Federal Register**.

Commenters (11, 12) express concern that, due to the delays from the petitioned SSI reconsideration and the federal plan development, the federal plan will negatively affect utilities' efforts to plan for compliance. Another commenter (14) reiterates this concern notably for smaller to mid-size wastewater utilities. The commenter (14) further highlights the short window for compliance and that facilities will likely have to take further regulatory action in areas such as greenhouse gas emissions, industrial pretreatment, anti-terrorism safeguards, and nutrient removal in addition to the numerous other rules and requirements that they are currently

required to follow. The commenter states the financial impact this regulation has already had on its facility (estimated at \$45,000 for administration and reporting, \$25,000 for fees, \$65,000 for third-party audits, and \$50,000 for a compilation of reports for state and federal agency reporting) and anticipates ongoing cost to ratepayers. A separate commenter (12) asks that the final federal plan contain a mechanism modeled on the provisions at 40 CFR 62.14536, which allow operators to petition for compliance extensions on a case-by-case basis.

RESPONSE: The EPA agrees with commenters that clarification of the compliance date and compliance pathways is necessary, but disagrees that a later compliance date is needed and notes that a later compliance date is not authorized by CAA section 129. In addition, comments regarding the appropriate compliance date are outside the scope of this action, and EPA did not propose any revisions to the compliance date. The EPA clarifies that the final compliance date is March 21, 2016. This compliance date was established in the March 21, 2011, EG. In addition, similar to the implementation of other EG under CAA section 129, the EPA proposed two compliance pathways, which would allow owners or operators of SSI units to either: (1) come into compliance with the plan within 1 year after the plan is promulgated; or (2) meet increments of progress and come into

¹⁰ If a facility is complying with a state implementation plan, the compliance date may be earlier than March 21, 2016.

compliance by the final compliance date. ¹¹ This framework was intended for a federal plan that was promulgated on schedule as required by sections 111 and 129(b)(3) of the CAA and 40 CFR 60.27(c) and (d), which require the EPA to develop, implement and enforce a federal plan for SSI units in any state without an approvable state plan within 2 years after promulgation of the EG. In this case, 2 years after the promulgation of the EG would have been by March 21, 2013. The EPA recognizes that because this federal plan is being finalized after the 2-year timeframe from the promulgation of the EG, it is not practical to retain these two pathways in the final federal plan, as the pathway with increments of progress would not comport with the final compliance date established by the EG. In fact, the EPA recognizes that by proposing these pathways, many commenters were confused and stated that they interpreted that the final compliance date was after March 21, 2016, which is not what the EPA intended.

Therefore, the EPA is revising the final rule to require that all SSI unit owners or operators submit a final control plan and achieve final compliance by March 21, 2016. The EPA has concluded that most facilities already have a final control plan in place and know what measures they are required to take in order to achieve compliance.

The EPA disagrees with the commenter's suggested framework for

²⁰¹⁰ State Implementation Guidance Document is available through the EPA's TTN at

http://www3.epa.gov/ttn/atw/129/hmiwi/epa453b10001_hmiwi.pdf.

allowing facilities to achieve final compliance up to 2 years after the publication of the final federal plan in the **Federal Register**. This would violate the statute, as section 129 of the CAA directs the EPA to implement the federal plan so that the plan will assure that each unit subject to the plan is in compliance with all provisions no later than 5 years after the date of the promulgation of the emissions guidelines, which was March 21, 2011.

The EPA disagrees with using a mechanism modeled on the provision at 40 CFR 62.14536 as there is no statutory authority under CAA section 129 for providing compliance extensions (i.e., allowing compliance after the compliance date). Lastly, the EPA disagrees that affected sources have had inadequate time to prepare to comply with this rule. The commenters do not point to any specific circumstances where compliance is not possible. In fact, one commenter notes that sources have been working to come into compliance since the March 2011 final rule was issued. The federal plan implements the EG for existing SSI units, which was promulgated on March 21, 2011. We believe that sources have had ample notification of this final compliance date and that they are aware of what measures they must take in order to comply.

2. Operator Training

<u>COMMENT:</u> Several commenters (08, 11, 12, 14) express varying opinions

¹² See 76 FR 15372.

on the proposed operator training requirements. One commenter (08) points out that the proposed 40 CFR 62.15920(b) requires that operator training and qualification must be obtained through a state-approved program or by completing the requirements that the section outlines. Proposed 40 CFR 62.15920(c) requires that operators must pass an examination designed and administered by a state-approved program or an administering instructor. The commenter suggests that some states will have neither created or identified an approved SSI operator training program, nor have identified any state-approved instructors to administer the training and examination. The commenter is concerned that the facility and operator would be in a situation in which it would be impossible to comply with the rule through no fault of the facility or operator.

Other commenters (11, 12) express appreciation of the EPA's flexibility on who can administer the SSI operator training program and the examination. Commenter (12) requests that the EPA verify its interpretation of the operator training requirements. Specifically, the commenter raises that, based on e-mail correspondence with the EPA, they understand that the proposed operator training requirements mean that a third-party or utility could develop a training program and exam and it need not be approved by the state or the EPA as long as it meets the requirements in 40 CFR 62.15920(c). The commenter states that they understand that this interpretation is only with respect to states that do not have approved state plans in place and

that, once a state plan is approved by the EPA, upon the effective date of a state plan, the federal plan would no longer apply as of the effective date of a state plan. Any operator training requirements would have to comply with the state plan.

Another commenter (14) is concerned that it will be difficult to meet the operator training requirements when no state training program exists.

RESPONSE: As the EPA recently clarified in a webinar on June 2, 2015, to states, tribes, territories, and local air agencies, the federal plan would require that an SSI unit cannot be operated unless a fully trained and qualified SSI unit operator is accessible, either at the facility or nearby such that the operator can be at the facility within 1 hour. 13 Operator training and qualification must be obtained through a state-approved training program or by completing the list of training requirements included in the proposed federal plan. The EPA explained that if a state program does not exist, facilities complying with the federal plan must complete the list of training requirements in order to comply with the rule.

Section 62.15920(b) of 40 CFR part 62 clearly states that there are two options for complying with the operator training requirements. The first option is to obtain training and qualification through a state-approved program. The second option is

EPA's outreach webinar on the federal plan proposal can be found at the SSI regulation Web site: http://www3.epa.gov/ttn/atw/129/ssi/ssipg.html.

to obtain training and qualification through completing an incinerator operator training course that includes at a minimum the topics listed in 40 CFR 62.15920(c). The rule further requires operators to complete an examination designed and administered by the state-approved program or an instructor administering the training topics listed in the rule. The rule also states that operators are required to conduct initial training and annual refresher trainings in addition to retaining documentation on-site of completed operator training. The EPA provides the following examples of how a training and examination program could work in order to comply with the requirements:

- Example 1: A third party administers an SSI operator training course and examination. The training course and examination syllabus cover the topics as described in 40 CFR 62.15920(c).
- Example 2: An affected SSI facility with necessary technical expertise administers an "in-house" SSI operator training course and examination. The training course and examination syllabus cover the topics as described in 40 CFR 62.15920(c).
- Example 3: SSI operators complete an SSI operator training course and examination through a state-approved training program (e.g., state-approved trainer or state-run program; may vary by state).

The EPA further clarifies that "state approved training program"

is not a "state implementation plan". The EPA recognizes that different states may have their own requirements for professional trainers in their states even if they do not have a state implementation plan in place. SSI unit owners and operators are encouraged to contact their state to find out if their state has its own requirements for trainers. Once a state plan is approved by the EPA, upon the effective date of a state plan, the federal plan would no longer apply to SSIs in that state. The state or local agency would implement and enforce the approved state plan in lieu of the federal plan and operator training requirements would have to conform with the state plan.

3. Performance Testing and Monitoring

As the EPA discussed in the federal plan proposal, we will not address comments on the underlying SSI EG, since those comments address issues outside the scope of the federal plan. We note that this section addresses issues that the EPA believes warrant clarification, even though they are not within the scope of this action. Many of the comments received on the proposed federal plan's monitoring and testing provisions recommend changes to be made in the EG, and since no such revisions were identified in the proposed federal plan, we are not making these changes at this time in the federal plan. We will consider making changes to the EG and corresponding changes to the federal plan to incorporate the

¹⁴ See 80 FR 23404.

suggested revisions in the future. However, the responses below provide clarification regarding the requirements of certain monitoring and testing provisions.

COMMENT: Multiple commenters (11, 12, 13, 18) respond to the EPA's solicitation of comments regarding the proposed provision at 40 CFR 62.16015, which would require SSI units to operate at a minimum of 85-percent of the maximum permitted capacity during performance testing. The EPA specifically solicited comments and additional data on whether the 85-percent requirement warrants a revision due to operational limitations or other factors. Two commenters (12 and 18) state that the capacity at which SSIs test will drive the overall setting of operating parameters that: (1) may be impossible to maintain at a lower (more real-world) throughput rate, and (2) if possible to maintain, may have negative environmental and cost implications. Under one commenter's (18) title V permit, stack tests are required and set the maximum (with an allowable exceedance up to 10-percent) for dry-tons-per-day solids loading. The commenter argues that using a stack test to set the maximum throughput makes sense when the stack test results are also used to set operating parameters. In addition, for this commenter, the permitted throughput is calculated as an average of three test runs, and two commenters (12 and 18) request the EPA to consider including this in the federal plan.

Commenters (12 and 18) provide the example that an SSI unit with a higher feed rate will have a higher air flow and, therefore, a higher pressure drop; pressure drop is one of the operating parameters that must be established. Under normal feed rates, SSIs will have lower air flows and lower pressure drops. They state that it may be necessary for some utilities attempting to achieve combustion zone temperature limits established for higher loading conditions to use auxiliary fuel to artificially increase bed temperature to meet the operating limit at lower loading conditions.

Commenters (12 and 18) discuss that it is not practical or economical for many SSIs to maintain a level of 85-percent during normal operations in order to ensure that operating parameters set at this level are consistently met. The commenters discuss that operation at this higher level will require frequent start/stop cycles, which accelerates the thermal aging of the system, shortens the useful life of the unit, results in highly variable feed composition, and uses more auxiliary fuel for stable operation. The commenters believe that these adverse impacts further increase the operating cost and adversely impact emissions from SSIs due to excessive fuel use and increased frequency of startup and shutdown modes. In other words, this would result in increased energy consumption and greenhouse gas emissions.

One commenter (12) explains that some SSI facilities have had to store sludge for extended periods of time to accumulate enough material to meet this requirement, as many SSIs routinely operate significantly below their maximum permitted capacity. If an operating facility has to store sludge to meet the 85-percent feed rate, the characteristics of the sludge will change, resulting in different operating requirements and performance for stored sludge than non-stored sludge processed during average conditions. The commenter further explains that many utilities simply do not generate enough sludge to burn at 85-percent of permitted capacity consistently. The commenter describes how sludge is fed at a rate to maintain a specific and narrow combustion temperature range. Variations in sludge composition will vary the feed rate as the commenter describes. During one SSI facility's recent performance test run, the sludge's percent volatile solids and British Thermal Unit (BTU) content were significantly higher than normal, which resulted in feed rates less than 85-percent as the SSI's BTU input capacity was reached. In other cases, SSI units have not been able to maintain feed rates at 85-percent of their permitted maximum capacity and also maintain other operating conditions during testing, resulting in test runs that do not meet the regulatory requirements (e.g., sludge volatile content and other sludge characteristics can vary significantly and feed

rates must be adjusted to maintain target combustion temperatures).

One commenter (12) reminds the EPA of their comments submitted on the October 14, 2010, proposal of the EG and NSPS (75 FR 63260) in which they stated that EPA's assumption that SSIs operate at 75-percent of the rated capacity was too high and that the EPA needed to consider other options. 15 The commenter further highlights their November 29, 2010, comment that raised concerns about requiring a specific operating parameter for feed rate. The commenter believes that the 85percent requirement was added at the 2011 final rule stage of the EG and NSPS as the EPA attempted to address the issue that their November 29, 2010, comments raised at the time. They further believe that the EPA removed the operating parameter for sludge feed rate and the requirement to regularly operate within that range, but the agency then added the 85-percent requirement for performance testing. The commenter requests that the EPA eliminate the 85-percent requirement and instead require the use of a minimum feed rate based on actual historical operating averages (i.e., the baseline would be each SSI's historical operating baseline, instead of permitted capacity). The commenter states that the EPA has previously

See November 29, 2010, comment submitted by the National Association of Clean Water Agencies. Document identification number EPA-HQ-OAR-2009-0559-0127.1. http://www.regulations.gov.

suggested in email correspondence and phone conversations that testing be conducted at both 85-percent of permitted capacity and at the historical operating average feed rates in order to establish the operating parameters at regular or normal feed rates. The commenter does not think that this is acceptable because this would require two separate compliance demonstration source tests and effectively double the cost of performance testing. They also do not think that there is valid regulatory purpose for establishing operating parameters at higher operating capacities (e.g., 85-percent) than are normally encountered, so they request that the EPA revise this requirement to instead require testing based on actual/historical operating average.

Commenter (11) discusses that their unit is rated by the manufacturer at a sludge feed rate of 2.0 dry-tons-per-hour. The rating was based on assumptions during its design, including volatile solids percentage in sludge. The commenter states that the SSI unit has never achieved the design sludge feed rate, much in part because the measured volatile solids content has been consistently higher than the design assumption. Under a normal optimal operation, the commenter can run a feed rate of 1.4-1.5 dry-tons-per-hour, which is at 75-percent of rated capacity. However, they describe that there are extended periods of time where the SSI unit operates at

lower feed rates (e.g., 1.1 dry-ton-per-hour), which is 55percent of rated capacity. The commenter explains that sludge feed rate dictates the target combustion temperature to achieve optimal combustion conditions while generating the least quantity of air pollutants. While the commenter will seek a lower permitted capacity in its air permit, it is likely that the SSI unit will not continuously operate within 85-100percent capacity range, including during test conditions. The commenter describes how operators must respond to varying conditions such as sludge quality, fluidized sand condition, and combustion air flow and temperature. The commenter believes that sludge feed rate should not be specified in the operation of an SSI, including during performance testing. The commenter asks the EPA to provide relief in this requirement by either expanding the minimum percentage requirement, or by implementing another means to determine "normal operation". One suggestion they recommend is to require that a performance test be conducted at a sludge feed rate within plus or minus 20percent of the average sludge feed rate during the past six months of SSI unit operation.

Commenter (13) recommends that the 85-percent threshold be replaced with a requirement that the minimum feed rate be based on historical operating average. The commenter explains that this suggestion is primarily due to the variability of the

sludge feed (e.g., percent solids, percent volatile solids, BTU content, percent primary sludge v. percent waste activated sludge, etc.), which impacts throughput. Furthermore, the commenter states that SSI facilities are finding that they will not be able to continuously meet some of the site-specific operating limits (e.g., wet scrubber pressure drop) established at 85-percent threshold or higher, when operating their incinerators at normal (lower) feed rates.

RESPONSE: While we solicited comment on the 85-percent of maximum permitted capacity performance testing requirement, the EPA has decided that it is not appropriate to make changes to the requirement at this time, in order to avoid inconsistencies between the federal plan and the EG, since the federal plan is intended to implement the EG. The EPA thanks the commenters for their valuable feedback and ideas. We will consider making changes to the EG and corresponding changes to the federal plan to address the suggested revisions in the future. If a particular operating parameter is inappropriate for a site-specific configuration, the facility may submit an alternative monitoring plan to the appropriate EPA regional office pursuant to 40 CFR 62.16050, 40 CFR 60.8 and 60.13.

COMMENT: One commenter (11) discusses the proposed 40 CFR 62.15995(a)(3)(ii)(C), which includes specific requirements for installation of a pH monitoring system if a scrubber is

designed to control emissions of HCl or SO_2 . Specifically, 40 CFR 62.15995(a)(3)(ii)(C)(1) will require that a pH sensor be placed in a position at the scrubber effluent. The commenter explains that the requirement will cause issues in establishing an operating limit and in operating and maintaining the pH probe because of the elevated temperature of scrubber effluent and presence of erosive ash and sand particulate. The commenter further explains that it is likely that the pH probe measurement will drift under these conditions. Additionally, regarding the establishment of operating limits, the commenter believes that it is likely that the pH of scrubber effluent will vary during a performance test, depending on the varying presence of HCl and/or SO_2 removed from the gas stream. The commenter states that using scrubber effluent pH is inconsistent with engineering design for scrubbers designed to remove acidic or alkaline gases from process air or flue. Typically, the adjustment and measurement of scrubber pH liquid is important for the feed (or influent) into a scrubber system. In a semantic sense, the term "scrubber liquid pH" used in 40 CFR 62.15985(a)(1) is typically understood to be the liquid introduced (i.e., feed) into a scrubber. This is a fundamentally different term than "scrubber effluent pH," as noted in 40 CFR 62.15995(a)(3)(ii)(C). The commenter recommends that the pH of scrubber liquid, specifically the feed water into a scrubber, be used for

establishing operating limits. The commenter also states that the pH monitoring system should be placed at the feed water, and not the scrubber effluent.

RESPONSE: This comment is outside the scope of the SSI federal plan, since the federal plan is intended to implement the EG. The EPA thanks the commenters for their valuable feedback and ideas. We will consider making changes to the EG and federal plan to incorporate the suggested revisions in the future. If a particular operating parameter is inappropriate for a site-specific configuration, under 40 CFR 62.16050, 40 CFR 60.8 and 60.13, the facility may submit an alternative monitoring plan to the appropriate EPA regional office.

COMMENT: One commenter (08) describes that the proposed 40 CFR 62.15995 includes requirements to prepare site-specific monitoring plans for continuous parameter monitoring systems (CPMS). The proposed rule contains specific sensitivity specifications for certain types of CPMS. The commenter explains that most SSIs have been operating satisfactorily with legacy CPMS, installed at the time of installation or shortly thereafter as the "kinks" were worked out. At this time, however, it is often impossible to obtain performance specifications for the CPMS components or the overall CPMS, for a variety of reasons. The commenter discusses that, when the equipment was purchased, performance specifications with that

degree of granularity were often not required as part of equipment specification. It may be impossible to now obtain the data retroactively from vendors or manufacturers, because suppliers are no longer in business, or the manufacturers did not acquire or retain the data because it was not required. Thus there will be situations in which an affected SSI unit has an existing continuous parameter monitoring equipment that is working satisfactorily with years of reliable performance, but for which the operator cannot produce the "paperwork" documenting that the unit meets the performance specification of the proposed 40 CFR 62.15995. The commenter asks the EPA what alternatives are available to operators of SSI units in these circumstances. The commenter also asks that if the rule is promulgated as proposed, will the operators of those SSI units be required to replace working and effective CPMS simply for the lack of "paperwork". The commenter believes that discarding equipment that is working for lack of "paperwork" seems unnecessary and wasteful, particularly since newer equipment with greater sensitivity might actually be more susceptible to breakdown or performance excursions. RESPONSE: While the EPA has stated its belief that it is prudent for records of specifications for measurement equipment to be kept, the EPA understands that these records may no longer exist. In cases where this information no longer exists,

that reason alone will not require facilities to replace their equipment. Instead, the facility may demonstrate that the equipment meets the requirements given in the rule. For example, for temperature measurements, such a demonstration could rely on comparison to a redundant temperature measurement device, a calibrated temperature measurement device or a separate sensor check and system check by temperature simulation.

It is important for monitoring equipment to meet minimum specifications in order to return data of known quality. While the monitor may be working, without data of known and satisfactory quality, neither the owner or operator nor the EPA can be assured that the facility is in compliance. COMMENT: One commenter (08) identifies that the proposed 40 CFR 62.15995(a)(7) would establish requirements to determine when a continuous monitoring system (CMS) is out of control. They specify that paragraph (a)(7)(i) sets forth that a CMS system would be deemed to be out of control if drift exceeds two times the applicable calibration drift specification (paragraph (a) (7) (i) (A)) or the unit fails certain required performance test audits (paragraph (a)(7)(i)(B)). As the commenter reads the proposed federal plan, the universe of CMS that fall under this provision is unclear. They discuss that one interpretation is that the proposed federal plan applies to all CMS, which

would indicate that an "out-of-control" specification would need to be developed for each CMS. Following this interpretation, all CMS that are not subject to performance audits would need to develop an "out-of-control" drift specification. The commenter asks how "out-of-control" specifications would be developed for CMS that are subject neither to a performance audit nor to drift. The commenter has an alternate interpretation of 40 CFR 62.15995(a)(7), which is that it applies only to CMS for which drift is a meaningful and relevant concern. The commenter believes that the rule as written, however, does not clearly limit 40 CFR 62.15995(a)(7) to such situations.

RESPONSE: The rule applies to all CMS. Section 62.15995 of 40 CFR part 62 requires owners or operators to develop and submit for the Administrator's approval site-specific monitoring plans for each CMS. Section 62.15995(a)(3) of 40 CFR part 62 requires owners or operators to identify ongoing performance evaluations in their site-specific monitoring plans for all CMS (both CEMS and CPMS). A failure of one of these ongoing activities (e.g., the performance evaluation described in the site-specific monitoring plan) constitutes an out-of-control period and triggers corrective action. The EPA further notes that owners and operators must conduct a performance evaluation of a pressure sensor no less frequently than annually per 40 CFR

62.1995(a)(3)(ii)(B)(5).

COMMENT: Two commenters (12 and 13) identify that under the EG and the proposed federal plan, the lowest 4-hour average effluent water flow rate at the outlet of the wet electrostatic precipitator (WESP) recorded during the most recent performance test demonstrating compliance with the particulate matter, lead, and cadmium limits, becomes the WESP's site-specific minimum water effluent flow rate. Commenters discuss that the data are supposed to be measured and recorded on an hourly basis, and compliance is determined on a 12-hour block average. Commenter (13) specifically notes that the EG only requires three 1-hour long performance test runs, which means that the minimum water effluent flow rate will actually be the lowest 1hour average. Both commenters convey that water does not continuously run through a WESP. A WESP is only flushed (clean) with water approximately once every 6 hours and the flush lasts for approximately 3 minutes. Commenter (13) explains that the rate at which flushing water is added to the WESP is normally in the range of 50-100 gallons per minute, but it can vary depending on the size of the unit.

Commenter (13) states that unlike other industries, all of the WESPs located at publicly owned treatment works (POTWs) are preceded by wet scrubbing systems and the gas stream entering the WESP is saturated with moisture. As a result, there is no need to install water sprays prior to the WESP's inlet. The commenter asks whether the use of water sprays in other industries is the reason that the minimum water effluent limit was included in the SSI rules. The commenter explains that unless flushing water is being utilized, the water effluent flow rate recorded during the performance test will only consist of a small amount of moisture that has been carried over from the wet scrubbers and the condensation that occurs within the WESP. A number of POTWs combine the effluent from their wet scrubbers and WESPs into a single pipe, making it almost impossible to accurately measure the WESP water effluent. The commenter requests that POTWs be allowed to monitor the WESP's flushing water inflow in lieu of measuring the WESP's effluent, if this requirement is retained in the final federal plan.

Commenter (12) states that the rule requires a minimum water flow rate for the WESP in gallons-per-minute (gpm), just like the scrubber water flow rate. Scrubber water, however, flows continuously while WESPs are only flushed once every 6 hours. Since the flushing water is not continuous, SSI unit owners and operators have difficulty developing a minimum flow rate. In addition, a WESP gravity effluent pipe with a diameter of 4 inches or 6 inches, necessary to avoid clogging in some configurations, is too large for a meter to accurately measure

the low rate of flow. In some cases, WESP effluent flows into a common drain pipe where backflow into the drain can affect the accuracy of the reading. One SSI unit owner/operator requests that they be allowed to measure the water feed to the WESP, instead of measuring the flow at the outlet of the WESP. The influent flow rate will be greater than or equal to the effluent rate due to possible evaporation within the unit. However, the commenter has a more basic question as to why the rule requires a minimum WESP effluent water flow rate as a site-specific operating parameter. Based on the information the commenter has collected, water flow does not change the WESP's collection efficiency. In fact, at some times, there can be more water draining out of the WESP then is being added to it. The exception is when flushing occurs, which is due to the condensation of the moisture in the exhaust gases that have been saturated in the wet scrubbers. The commenter requests clarification on this topic in the final federal plan.

Similarly, another commenter (16) believes that 40 CFR 62.15985 as proposed is impractical. The commenter states that 40 CFR 62.15985 indicates that water flow rate at the outlet of the WESP must be monitored. The commenter remarks that water usage by the WESP is intermittent and at many times too minimal for a mag-meter of the size necessary on the effluent pipe to accurately measure. A pressurized influent pipe supplying water

to the WESP is much smaller, improving the accuracy of the magmeter. The commenter describes that a WESP gravity effluent pipe with a diameter of 4 inches to 6 inches, necessary to avoid clogging, is too large for a mag-meter to accurately measure the low rate of flow.

Commenter (13) references EPA guidance document for "Compliance Assurance Monitoring" (CAM) that covered WESPs used for particulate matter control; voltage was listed as the prime and only measurement for compliance monitoring. The commenter states that this document also acknowledged that wash water is only used on an intermittent basis and results in slight and temporary reductions in voltage. Since the water effluent flow rate is not indicative of a WESP's removal efficiency, WESPs are subject to a site-specific secondary voltage or amperage operating limit, and WESPs located at POTWs do not require water sprays, the commenter asks the EPA to consider eliminating the WESP water effluent operating parameter from the EG and final federal plan.

RESPONSE: The choice of site-specific operating parameters is outside the scope of the federal plan, and EPA did not propose or solicit comment on revisions to these provisions. The EPA thanks the commenters for their valuable feedback and ideas. We will consider making changes to the EG and federal plan to incorporate the suggested revisions in the future. The EPA

recognizes that the commenters have asked for clarifications on some of the points related to WESP water flow and we provide clarification below.

First, commenters note that the lowest 4-hour average effluent water flow rate at the outlet of the WESP, recorded during the most recent performance test demonstrating compliance with the PM, Pb, and Cd limits, becomes the WESP's minimum water effluent flow rate, but that the regulation only requires three 1-hour performance test runs, which means that the minimum water effluent flow rate will actually be the lowest 1-hour average. The EPA notes that the regulation requires a minimum sample volume for each test run, not a minimum sample time. It is possible that some performance tests for PM and metals may not require 4 hours in total to achieve the minimum sample volume for the three runs. However, because the operating parameters must be set based on a 4-hour average from the performance test, the EPA has concluded that it is necessary to test for at least 4 hours (in total, not per run), even if this means collecting more than the minimum sample volume prescribed in the rule.

Second, the EPA is clarifying why effluent water flow is an appropriate operating parameter for a WESP and why it accurately reflects a WESP's ability to efficiently collect PM. All ESPs operate under the principle that opposite charges

exist between the plates and the particles. When the plates become too caked with collected particles, there will no longer be enough pull from the plates to attract the particles from the incoming gas stream. The plates must be continuously or intermittently (at regular intervals) washed to maintain the attraction. In some situations, either influent or effluent water flow can provide an adequate indicator of performance. However, as one commenter noted, sometimes the influent flow rate is maintained at greater than or equal to the effluent rate due to possible evaporation within the unit. In this type of situation, it is important to monitor the effluent flow rather than the influent flow. If the water evaporates and does not make it all the way through the system and does not clean all of the plate surfaces, than the water flow is not adequate, but this would not be reflected if measuring inlet flow rate. Further, the commenter's assertion that the EPA's CAM guidance lists voltage as the prime and only measurement for compliance monitoring is incorrect. The CAM guidance is meant only to provide examples for operating parameters for different control devices; it is not meant to be all inclusive. However, the second example for WESP in the CAM guidance lists three different monitoring parameters: secondary voltage, quench inlet temperature, and WESP outlet temperature. The WESP outlet temperature measurement serves as an indicator of water flow

through the system, thereby demonstrating that even in the CAM guidance the EPA has acknowledged the importance of water flow in a WESP.

The EPA also reminds commenters that if a particular operating parameter is inappropriate for their site-specific configuration, under 40 CFR 62.16050, 40 CFR 60.8 and 60.13 the facility may submit an alternative monitoring plan to the appropriate EPA regional office.

COMMENT: One commenter (12) discusses that the 2011 EG and proposed federal plan include parametric monitoring requirements for good combustion at 40 CFR 62.15960. The commenter points out that a definition of "combustion chamber" is not provided in 40 CFR 62.16045, though the definition for "fluidized bed incinerator" makes mention of "combustion chamber." A multiple hearth incinerator typically includes drying, combustion and cooling zones and could also include an afterburner for carbon monoxide removal. The commenter believes that it is unclear whether the requirement under 40 CFR 62.15960 to establish a minimum operating temperature applies to (a) the combustion chamber within a fluidized bed incinerator and the afterburner in a multiple hearth incinerator only, or (b) to all hearths/zones within a multiple hearth incinerator as well as (a), or (c) to only the combustion zone within a multiple hearth incinerator as well as (a), or (d) does not apply at all to any of the

hearths/zones within a multiple hearth incinerator. The commenter stresses the importance of developing site-monitoring plans for temperature sensors that are affected under 40 CFR 62.15995(a)(3)(ii)(D).

RESPONSE: The SSI federal plan does not define the term "combustion chamber." In response to the comment regarding where the minimum combustion temperature is applied, we are clarifying that the minimum combustion temperature is to be applied in the combustion zone of the unit. The drying hearth or zone temperature typically ranges between 800 and 1,400 degrees Fahrenheit. In the drying zone, the sludge that is dried is heated so that efficient combustion may then occur. We do not believe it is appropriate to establish minimum combustion temperature in the drying zone because the drying zone's purpose is to reduce the moisture and heat up the sludge, not to combust the sludge. The temperature of the combustion zone is typically 1,700 degrees Fahrenheit. Combustion typically requires at least greater than 1400 degrees Fahrenheit to destroy solids and fixed carbon. We intend for the minimum combustion temperature to be applied in the combustion zone in order for good combustion to occur. From the combustion zone, the cooling zone occurs next where ash cools and heat is transferred to the incoming combustion air. The cooling zone also would not be appropriate to apply the

minimum combustion temperature because combustion should have completed by this point.

COMMENT: One commenter (12) states that they have had numerous discussions with the EPA about the EG and proposed federal plan's requirement relating to fugitive visible emissions from ash handling. They identify that other Maximum Achievable Control Technology standards specifically state that this requirement applies to emissions from the building to the atmosphere, not from equipment within the incinerator building, and EPA has confirmed in phone conversations with the commenter that the same is true for the visible emissions requirements for ash handling in the EG and proposed federal plan. The commenter requests that this be clearly stated in the final federal plan. The commenter believes that any attempt to apply the fugitive ash requirement within the incinerator building would be unjustified and lead to major compliance issues. RESPONSE: The underlying emissions guideline is clear that the requirement applies to fugitive visible emissions from the ash handling system. The definition of an SSI unit at 40 CFR 62.16045 describes that the unit includes all ash handling systems connected to the bottom ash handling system and that the combustion unit bottom ash system ends at the truck loading station or similar equipment that transfers the ash to final disposal. Tables 2 and 3 of the federal plan regulatory text further specify that the visible

emissions of combustion ash from an ash conveying system include conveyor transfer points. It is not predicated on the location of the ash handling system. The 2011 EG and NSPS response to public comments also explains that the rule should and does require that the source owner or operator verify that the measures necessary to limit the amount of fugitive dust exiting the transfer points and exhausts from the building are such that they meet the visible emissions standard. The commenter did not provide any specifics as to why the emission standard for fugitive emissions from ash handling is unjustified or would lead to major compliance issues.

COMMENT: One commenter (12) states that according to the EG and the proposed federal plan, all of the operating parameters, with the exception of scrubber water pH, are to be equal to the lowest 4-hour average measured during the most recent compliance test. The commenter states that EPA staff have indicated that when writing the EG, EPA personnel assumed that each of the three required test runs would be 4 hours in duration. However, the EPA included air emission test protocols in the final rule for performance testing that allow three 1-hour test runs. During correspondence with EPA, the commenter states that EPA staff agreed that 1-hour test runs were acceptable for establishing operating parameters. Furthermore,

¹⁶ See Docket Identification Number EPA-HQ-OAR-2009-0559-0171.

the EPA agreed that the lowest 4-hour average should be deleted and replaced with the 1-hour test run average already agreed to in principle. The commenter asks the EPA to confirm this in writing in the final federal plan and through the appropriate process to update any state implementation plans, as well in 40 CFR part 60, subpart LLLL (NSPS for SSI units).

RESPONSE: The EPA notes that the regulation requires a minimum overall sample volume for each test run, not a minimum sample time. It is possible that some performance tests for PM and metals may not require 4 hours in total to achieve the minimum sample volume for the three runs. However, because the operating parameters must be set based on a 4-hour average from the performance test, the EPA has concluded that it is necessary to test for at least 4 hours (in total, not per run), even if this means collecting more than the minimum sample volume prescribed in the rule.

COMMENT: One commenter (12) recognizes that numerous SSI unit owners and operators have raised questions regarding setting and implementing operating limits. The commenter provides the following example: during a recent performance test at one facility to establish venturi water flow rate, when the flow rate was recorded at 344 gpm. The commenter asks whether the utility must set the flow rate at the level or whether it can set the flow rate at 340 gpm. The commenter states that SSI

unit owners and operators are not familiar with these provisions and would benefit from any additional guidance the EPA can provide. The commenter states that some leeway makes sense due to measurement variability. The commenter believes that compliance with the parametric limit should be based on the average high/low value (as appropriate) plus or minus 30-percent, consistent with the existing 40 CFR part 60, subpart 0 requirements. The commenter requests that the EPA clarify how averages are to be calculated. They state that utilities need to know how the x-hour averages are calculated for each operating parameter. Scrubber flow rate, liquid pH, combustion chamber operating temperature, etc. limits all depend of knowing how this calculation must be performed.

RESPONSE: The rule provides sufficient flexibility to owners and operators to establish monitoring parameters that are achievable on an on-going basis. The owner and operator also has the flexibility to conduct repeat performance tests to reestablish performance tests parameters.

While 40 CFR part 60, subpart MMMM, do not provide for the plus or minus 30-percent allowance that is in 40 CFR part 60, subpart O, the EPA notes that the operating parameter averaging times in subpart MMMM are much longer than the averaging times in subpart O. This is meant to account for the short-term fluctuations in the operating parameter readings and serves a

similar purpose to the 30-percent allowance. The EPA does not think that providing the 30-percent allowance on top of the long averaging times is appropriate for ensuring continuous compliance.

Section 62.15985 of 40 CFR part 62 describes how operating limits are established and Table 4 of the federal plan regulatory text describes how to demonstrate compliance with operating parameters limits. For example, minimum combustion chamber temperature is equal to the lowest 4-hour average combustion chamber temperature during the performance test. This is likely the combustion chamber measured over one test run, as the test run for dioxins and furans is likely to last around 4 hours. If this 4-hour average is 1,802 degrees Fahrenheit, the limit is 1,802 degrees Fahrenheit, not 1,800 degrees Fahrenheit. On a continuous basis, the combustion temperature would be measured and recorded at least once every 15 minutes, and those data would be used to calculate hourly arithmetic averages. The hourly average would then be used to calculate a 12-hour block average. The 12-hour block average would be compared to the lowest 4-hour average recorded during the test (1,802 degrees Fahrenheit in this example) to determine compliance. Compliance with the other operating parameter limits are demonstrated similarly according to the specific timeframes noted in 40 CFR 62.15985 and Table 4 for each operating parameter.

COMMENT: One commenter (12) requests that the EPA considers building some measure of flexibility into the site-specific operating limits. Specifically, the commenter suggests that the enforceable site-specific operating limit could be higher or lower than the limit established during the compliance tests within some defined boundaries. The commenter provides an example: if the lowest total pressure drop during the testing is 40 inches and the particulate matter and the metal emissions rates are all at or below 75-percent of the standards¹⁷, is EPA willing to reduce the total pressure drop operating limit to 36 inches? The commenter believes that the EPA has allowed this type of flexibility in its 40 CFR part 60, subpart 0, and 40 CFR part 503 requirements.

RESPONSE: This comment is outside the scope of this action, since EPA is adopting a federal plan that simply implements the underlying requirements of the EG. The EPA thanks the commenters for their valuable feedback and ideas. We will consider making changes to the EG and federal plan to incorporate the suggested revisions in the future. If a particular operating parameter is inappropriate for a site-specific configuration, under 40 CFR 62.16050, 40 CFR 60.8 and 60.13 the facility may submit an alternative

 $^{^{17}}$ The commenter acknowledges that the EG does allow for reduced frequency of testing for pollutants that are at or below 75-percent of the emissions limits for at least two consecutive years.

monitoring plan to the appropriate EPA regional office.

COMMENT: One commenter (12) states that SSI unit owners and operators are concerned they will be required to meet the emissions limits required by the federal plan and the operating parameters immediately after the initial compliance test. Based on conversations with EPA regional staff, the commenter understands that, as long as an SSI unit continues to operate as specified in an existing title V permit or other authorizing document (where there is no title V permit), they are not required to operate the control equipment under the established parameters of the rule's initial compliance test until the compliance date of March 21, 2016 (or earlier date specified by a state implementation plan). The commenter asks the EPA to confirm this in writing.

RESPONSE: The EPA reiterates that the final compliance date of the federal plan in March 21, 2016. SSI units will need to be in compliance by that date, including operating within the limits of the operating parameters they establish during the initial performance test. Compliance before the compliance date is encouraged but not required. SSI units subject to state plans may be required to meet earlier compliance dates. The EPA notes that SSI units must also comply with the requirements in their title V operating permits.

COMMENT: One commenter (16) states that proposed 40 CFR

62.16015 implies that the use of the bypass stack when sewage sludge is not being charged is not an emission standard deviation. Section 62.16015 of 40 CFR part 62 states that use of the bypass stack at any time that sewage sludge is being charged to the SSI unit is an emissions standards deviation for all pollutants listed in Table 2 or 3 of the subpart. The commenter asks the EPA if this interpretation is correct. Similarly, the commenter states that proposed 40 CFR 62.15955 implies that emissions limits and standards do not apply to a bypass stack or vent if sewage sludge is not being combusted. Section 62.15955 of 40 CFR part 62 states that emissions limits and standards apply at all times the unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). The commenter asks EPA if their interpretation is correct.

The commenter (16) further identified that 40 CFR 62.15970 appears to conflict with 40 CFR 62.15955. Section 62.15970 of 40 CFR part 62 reads, "emission limits and standards apply at all times and during period of malfunction." Section 62.15955 of 40 CFR part 62 includes the proviso "at all times the unit

is operating." The commenter interprets the statement, "at all times" as written in 40 CFR 62.15970 to conflict with the implication in 40 CFR 62.15955 that emissions limits and standards apply to a bypass stack while sewage sludge is in the combustion chamber. The commenter points out that the term "operating" as used in the proposed federal plan is not defined. The commenter asks the EPA to clarify if the term "operating" is the period of time when sludge is being combusted in the incinerator, or is the term to mean any period of time that burners are on in the incinerator, regardless of whether or not sludge is being combusted. The commenter also points out that the term "operating limits" is used in the regulations, but the definition of "operating" is not clearly defined.

Similarly, the commenter cites a discussion at 80 FR 23411, which states that "any incident of deviation, resumed operation following shutdown, force majeure... are required to be reported to the Administrator." The commenter reiterates that the term "shut-down" is defined as "the period of time after all sewage sludge has been combusted in the primary chamber." The commenter explains that it is common practice for an SSI facility to run out of sludge to incinerate, and is therefore "shutdown" on a regular basis, either weekly or possibly more frequently until they have enough sludge to incinerate. The commenter asks the EPA to clarify whether this

discussion in the preamble of the federal plan proposal means that each time an SSI facility runs out of sludge and/ or temporarily shuts off the sludge feed to the incinerator for operational reasons, and then resumes burning sludge, the Administrator must be notified. The commenter asserts that "shutdown" by definition can exist with the burners on but with no sludge being combusted. The commenters interprets that this could mean that the term "operation" should be defined as any time sludge is being combusted in the incinerator.

The commenter further states that 40 CFR 62.15970 conflicts with their understanding that, during the time when sludge is not being combusted in the incinerator, it is not a deviation if the natural draft damper is open. Section 62.15970 of 40 CFR part 62 states that for determining compliance with the carbon monoxide (CO) concentration limit using CO CEMS, the correction to 7-percent oxygen does not apply during periods of startup or shutdown. Use the measured CO concentration without correcting for oxygen concentration in averaging with other CO concentrations (corrected to 7-percent oxygen) to determine the 24-hour average value. The commenter explains that CEMS obtain samples from the main incinerator stack, after pollution control equipment. The CEMS does not sample from the natural draft stack, therefore while the natural draft stack is open the CEMS is in essence sampling ambient air and therefore inclusion of the CO concentrations during these times seems

irrelevant. The commenter states that CO is still required to be monitored when sludge is not being combusted in the incinerator during a period of shutdown. The commenter asks EPA to clarify why, if emission limits do not apply when sludge is not being combusted, CO must continue to be monitored, which requires the constant operation of a scrubber, a WESP, and an afterburner to obtain a valid CO reading.

RESPONSE: The language in 40 CFR 62.16015 is clear in specifying that use of the bypass stack when sewage sludge is charged is a deviation of the standards. Section 62.15955 of 40 CFR part 62 also clearly states that the emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber. EPA disagrees with the commenter that 40 CFR 62.15970 conflicts with 40 CFR 62.15955. The emissions standards apply at all times. While we would expect that the source could meet the emissions limit when not charging sludge (e.g., when burning a fuel such as natural gas), that is not a given. Therefore, we did not provide specific rule language for the use of the stack bypass when sewage sludge is not being charged as the "flip" side to the requirement at 40 CFR 62.16015 and 40 CFR 62.15955.

Defining terms in the federal plan that are not defined in the underlying EG is beyond the scope of this rulemaking. CAA section 129 clearly directs the EPA to structure the rule to

include monitoring provisions of parameters relating to the operation of the unit and its pollution control equipment. Furthermore, we believe that the term "operating limit" is sufficiently understood by the regulated community. The EPA points out that the federal plan does define the term "operating day" to mean a 24-hour period between 12:00 midnight and the following midnight during which any amount of sewage sludge is combusted at any time in the SSI unit. 18

Regarding the differing language "at all times when the unit is operating" in 40 CFR 62.15955 and the language "at all times" in 40 CFR 62.15970, we do not believe that the underlying EG intended any significance to this difference. As discussed in the preamble to that rule, we are clear that the emissions limits and standards apply at all times (see 75 FR 63265 and 75 FR 63282).

The EPA is finalizing the notification requirements as proposed to require that sources notify the Administrator following any incident of deviation, force majeure, intent to stop or start use of CMS, and intent of conducting or rescheduling a performance test. EPA clarifies that notification of resumed operation following shutdown as cited by the commenter at 80 FR 23411 is clear in the rule text.

Specifically, the notification of resumed operation following

¹⁸ See 40 CFR 62.16045.

shutdown of the unit is in the context of a qualified operator deviation. See 40 CFR 62.15945(b)(i) and (ii), 40 CFR 62.16030(e), and table 6 in the rule. Please note that the rule requires other notifications associated with a unit ceasing operations or going "offline". 19

Lastly, 40 CFR 62.15970 clearly states that operating limits only apply when sludge is being combusted including residence time, but the emission limits apply at all times. The definition of bypass stack indicates that the bypass stack's intended purpose is to avoid severe damage to air pollution control devices or other equipment.²⁰ The EPA did not intend for facilities to use the bypass stack at all times when there is no sewage sludge being burned. Therefore, emissions should generally be routed to the main stack even during periods when sewage sludge is not being burned, and the requirement to continue monitoring the emissions with the CO CEMS is relevant, as compliance with the emission standard is still required during these periods.

COMMENT: One commenter (16) asks the EPA to clarify if 40 CFR 62.16020 includes periods of time when sludge is not being

¹⁹ For a full list of notification requirements, please see Table 6 of 40 CFR part 62, subpart LLL.

Comments received on the 2011 EG and NSPS indicate that bypass stacks are an essential part of the safety equipment and use of the stack indicates that the unit is not operating under normal conditions. See Docket Identification Number EPA-HQ-OAR-2009-0559-0171.

combusted in the incinerator. Section 62.16020 of 40 CFR part 62 states that if your SSI unit has a bypass stack, you must install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack including date, time, and duration. The commenter explains that it is common practice for SSIs to open the bypass stack and "coast" on natural draft during periods when sludge is not being combusted in the incinerator in order to save fuel, electricity, and wear and tear on equipment. The commenter, referencing their comment that they interpret 40 CFR 62.16015 to imply that the use of the bypass damper when sludge is not being combusted in the incinerator is not a deviation, asks whether the recordkeeping and reporting requirements of 40 CFR 62.16020 do not apply while not combusting sludge in the incinerator.

RESPONSE: The rule is clear as written. The requirement to install, calibrate, maintain and operate a device or method for measuring the use of the bypass stack including date, time and duration applies when sludge is combusted and when sludge is not combusted.

COMMENT: One commenter (16) asks the EPA to clarify if 40 CFR 62.16015 is to be interpreted to mean that each daily calibration check, zero and span adjustments, and quarterly and annual calibrations must be reported in a deviation report.

Section 62.16015 of 40 CFR part 62 states that any data collected during monitoring system malfunctions, repairs, or required monitoring system quality assurance or control activities must be reported in a deviation report.

RESPONSE: As the commenter notes, periods of equipment malfunction, repairs and out-of-control periods are to be reported as deviations. While we do not intend all instances of required quality assurance and quality control activities to be reported as deviations, to the extent that ongoing quality assurance and quality control activities require an amount of time such that an hourly average cannot be determined for that hour consistent with the requirements given in 40 CFR 60.13(h)(2)(iii) (i.e., there are not enough data collected during the hour), those periods should also be reported as deviations. Reporting of such periods informs regulatory authorities when unusual circumstances occur, allowing increased scrutiny as necessary.

COMMENT: One commenter (16) asks that the EPA clarify how 40 CFR 62.15985 should be interpreted. Section 62.15985 of 40 CFR part 62 states that we must perform checks at least once each process operating day to ensure pressure measurements are not obstructed (e.g., check for pressure tap plugging daily). The commenter explains that their pressure transducers and transmitters operate with a 4 to 20 milliamp signal sent to a

controller that monitors the pressure reading and controls the equipment necessary to maintain the operating setpoint.

Disconnection of the transducer to check "the tap" causes the signal from the transmitter to send incorrect milliamp signals back to the controller, which in turn can cause the controller to erroneously control the equipment, or, in a worst case scenario, to trigger safety shut-offs of the incinerator itself.

RESPONSE: In general, we are not specifying how performance evaluations are to be performed. Due to the many variations in monitoring equipment, the manufacturer of the equipment is the best source for determining the proper technique for performing most performance evaluations. The site-specific monitoring plan must include information on routine quality assurance and quality control procedures. The plan should include not only a schedule for performing the performance evaluations, but also a description of how the evaluations will be performed. Unless specified, the EPA is providing the facility with discretion to determine the best method to perform these evaluations for these site-specific monitoring systems. The facility, in conjunction with the equipment manufacturer, should determine the best manner for demonstrating that the pressure measurements are not obstructed. One example of such a procedure, checking for pressure tap pluggage, is provided, but it is not the only possible option.

COMMENT: One commenter (16) asks that EPA clarify how 40 CFR 62.15990 should be interpreted. Section 62.15990 of 40 CFR part 62 requires that a "performance evaluation" of a pH meter be performed daily. The commenter explains that companies that provide in-line continuous pH meters are not aware of any feature other than a calibration to demonstrate the accuracy of the meter, and calibrations are only required quarterly. The commenter points out that different regulators may consider the term "performance evaluation" differently, and may in fact consider a calibration as the only good method to determine the performance of the meter, which is not reasonable to do on a daily basis.

RESPONSE: In general, we are not specifying how performance evaluations are to be performed. Due to the many variations in monitoring equipment, the EPA believes that the manufacturer of the equipment is the best source for determining the proper technique for performing most performance evaluations. The site-specific monitoring plan must include information on routine quality assurance and quality control procedures. The plan should include not only a schedule for performing the performance evaluations, but also a description of how the evaluations will be performed. Unless specified, the EPA is providing the facility with discretion to determine the best method to perform these evaluations for these site-specific monitoring systems.

A performance evaluation and a calibration are not meant to be the same thing, although a calibration could certainly suffice in lieu of a performance evaluation. The intent of a performance evaluation is to demonstrate that the equipment is still functioning within a specific degree of accuracy. It is akin to performing a calibration check of a CEMS in lieu of performing a CEMS calibration; in the former, the facility would merely show that the CEMS is still within a certain accuracy of a known standard, but the CEMS would not be adjusted in any way. The EPA has not provided specific examples of a pH meter performance evaluation, but one such example is performing a one-point check on a known buffer solution. The facility, in conjunction with the equipment manufacturer should determine the best manner for demonstrating that the pH meter is reading accurately each day.

COMMENT: One commenter (16) discusses their overall operations. Their MH unit has been in operation since 1994 and the air pollution control devices include a venturi scrubber, a plate scrubber, a WESP, and a regenerative thermal oxidizer (afterburner). Their standard operating procedure is to initiate the combustion of sludge on Monday, with continuous combustion until Saturday or Sunday depending on the amount of sludge inventory. Once they run out of sludge, charging of sludge to the incinerator is stopped, and the temperature of the SSI unit is stabilized to what they consider to be a cool

standby condition (hearth number 3 is at 1,100 degrees Fahrenheit). Approximately 4 hours after the sludge feed is stopped, well past the residence time of sludge in the incinerator, the induced draft fan is shut off and the natural draft damper opens. Monday is then used for preventative maintenance or other work on the unit and pollution control equipment. During the time when the SSI unit is on natural draft, the scrubber, WESP, and afterburner are off-line. This allows the commenter the flexibility of shutting off the WESP and/or the afterburner. Late on Monday, SSI unit temperatures are raised to 1,350 degrees Fahrenheit in preparation of again burning sludge, and the induced draft fan is re-started, placing the scrubber, WESP, and the afterburner back on-line. Then sludge feed to the unit is initiated. This process occurs weekly, possibly more often if unexpected maintenance on any of the SSI unit equipment or pollution control equipment becomes necessary.

The commenter states that the proposed federal plan appears to imply that now any SSI unit owner or operator can never shut the induced draft fan off and coast the incinerator in a cool standby condition with the natural draft damper open even if sludge is not being combusted in the SSI. The commenter believes that this is implied because SSI unit owners and operators are directed to average CO at 7-percent oxygen while

combusting sludge and with CO while not combusting sludge, to obtain the 24-hour CO average. CO monitoring probes, however, are only installed on the induced draft fan stack, not on the natural draft stack, so in order to obtain the "average" CO reading, the induced draft fan has to be on-line at all times. Further, the commenter believes it is implied that if the induced draft fan is shut off (even when not combusting sludge), this is a reportable deviation that could subject the facility to enforcement action. The commenter further describes that any facility has to be able to shut off the induced draft fan for preventative maintenance, for other scheduled maintenance, and to save fuel without having it considered a deviation or violation. Additionally, the commenter states that it is not practical to run the induced draft fan when first turning on the burners (start-up) after a cold shutdown. The induced draft fan is not sized for cold air, and the temperatures inside the MH incinerator must be raised slowly, in most cases not more than 50 degrees per hour with several extended periods of "soak" that are intended to protect the refractory and brick. Running the induced draft fan during "start-up" from a cold start requires more fuel and requires electricity, and makes it difficult to properly raise temperatures to the proper burning range. However, 40 CFR 62.15970 implies that CO readings must be obtained at all times after start-up, not just when combusting sludge in the SSI. In order to do this, the induced draft fan must be turned on before the burners are even lit.

RESPONSE: Section 62.15970 of 40 CFR part 62 clearly states the emission limits apply at all times. The definition of bypass stack indicates that the bypass stack's intended purpose is to avoid severe damage to air pollution control devices or other equipment. As the commenter infers from the CO CEMS language, the EPA did not intend for facilities to use the bypass stack at all times when there is no sewage sludge being burned, and emissions should generally be routed to the main stack even during periods when sewage sludge is not being burned, except in cases when it is necessary to route emissions to the bypass in order to avoid damage to equipment.

4. Status of State Plans and Federal Plan Delegation

COMMENT: Multiple commenters (09, 10, 12, 15) request that the EPA update the status of state plans in Table 2 of this preamble. One commenter (09) confirmed that the Minnesota Pollution Control Agency will not be submitting a state plan to the EPA but instead plans to incorporate federal plan requirements into the affected SSI's title V permits once the federal plan is promulgated. One commenter (10)

Comments received on the 2011 EG and NSPS indicate that bypass stacks are an essential part of the safety equipment and use of the stack indicates that the unit is not operating under normal conditions. See Docket Identification Number EPA-HQ-OAR-2009-0559-0171.

requests that the EPA reflect that the state of Rhode Island submitted a draft state plan to the EPA on October 10, 2014. One commenter (12) identified the state of Virginia as having received EPA approval of its state plan. Another commenter (15) clarifies that they intend to seek delegation of the federal plan for SSI units.

RESPONSE: The EPA thanks the commenters for submitting these updates and corrections. We have reflected these changes in the record to this final federal plan and in Table 2, which is included in section II.C. of this preamble.

COMMENT: Commenters (09, 11, 12, 15) request that the EPA clarify the implementation roles for "states," "locals," and the EPA with respect to the implementation of the EG. One commenter (12) believes that the lack of clarity is particularly an issue in those states where there are both state and local air agencies, but the states have not yet developed a state plan. The commenter requests that the EPA continue to work with state and local regulators to address these concerns. Commenter (11) further outlines that the proposed federal plan does not clearly discuss how the authority to implement the federal plan will be transferred to local air agencies, especially if a state decides not to develop a state plan or further adopt or implement the federal plan. The commenter states that Washington state, where five municipalities operate SSI units, has not expressed a decision to submit a draft state plan to the EPA or take delegation of the federal plan. The commenter is concerned with the outcome of how the

three local agencies affected will manage the implementation of the EG. The commenter urges the EPA to work directly and closely with local air agencies in order to clearly and effectively provide authority and technical guidance to SSI unit operators. The commenter believes that such authority should extend to local agencies so they can use their discretion to work with SSI unit operators in determining appropriate final compliance dates as proposed in 40 CFR 62.15875. Another commenter (15) states that they are a local air authority in Washington state that has an approved title V program and has received regular delegation approvals for NSPS and NESHAP regulations (40 CFR part 60 and 63). Their most recent delegation approval from EPA Region 10 was signed on February 19, 2015, for the NSPS for new SSI units at 40 CFR part 60, subpart LLLL. The commenter states that the local agency intends to seek delegation of the federal plan as soon as possible. This local air agency plans to expedite their request for delegation following the final federal plan instructions so that they can address the regulatory gap in the title V permits for units in their district.

RESPONSE: The EPA is finalizing the delegations of authority provisions as proposed, and clarifying that local agencies may directly request delegation of authority to implement the SSI federal plan with respect to sources within their jurisdiction provided they have authority under state law to do so. While the preamble to the proposal does not specifically address how to address the situation

where there are both state and local air agencies and the state has not yet developed a state plan, the EPA stated that it will do all that it can to expedite delegation of the federal plan to state and local agencies in those situations. However, since this involves resolution of issues of state authority, the EPA expects that local agencies will work with their states and the appropriate EPA regional office to resolve these issues affecting their ability to implement the EG under a state plan or delegated federal plan for the area. See 40 CFR 60.26(e). In the meantime, a state or tribe with an approved title V program with authority under state or tribal law to incorporate CAA section 111/129 requirements into its title V permits is able to implement and enforce these requirements in the permitting context. See 80 FR 23413.

As the EPA discussed in the proposed federal plan the EG are not directly enforceable; they are only fully implemented when the EPA either approves a state plan or adopts a federal plan that implements and enforces the EG.²² Congress has determined that the primary responsibility for air pollution prevention and control rests with state and local agencies. (See section 101(a)(3) of the CAA.)

Consistent with that overall determination, Congress established sections 111 and 129 of the CAA with the intent that the state and local agencies take the primary responsibility for ensuring that the emissions limitation and other requirements in the EG are achieved.

 $^{^{\}rm 22}$ See the discussion beginning on 80 FR 23411.

Also, in section 111(d) of the CAA, Congress explicitly required that the EPA establish procedures that for state CAA section 111(d) plans that are similar to those under CAA section 110(c) for state implementation plans. Although Congress required the EPA to propose and promulgate a federal plan for states that fail to submit approvable state plans on time, states may submit plans after promulgation of the SSI federal plan.

The EPA directs states, tribes, and locals that intend to take delegation of the federal plan to submit to the appropriate EPA regional office a written request for delegation of authority. 23 The requester must explain how they meet the criteria for delegation. The EPA references the "Good Practices Manual for Delegation of NSPS and NESHAP" (EPA, February 1983) as a guidance document for states, tribes, and locals to follow. The EPA clearly describes two mechanisms for transferring authority to state, tribal, and local agencies: (1) EPA approval of a state plan after the federal plan is in effect, and (2) if a state does not submit or obtain approval of its own plan, the EPA delegation of authority to a state, tribal, or local agency to implement certain portions of the federal plan to the extent appropriate and allowed by law. The EPA will generally delegate the entire federal plan to the requesting agency. These functions include administration and oversight of compliance reporting and record keeping requirements, SSI inspections and

 $^{^{23}}$ See 40 CFR 62.15865 and 40 CFR 62.16050.

preparation of draft notices of violation, but will not include authorities retained by the EPA.

Agencies that have taken delegation, as well as the EPA, will have responsibility for bringing enforcement actions against sources violating federal plan provisions. Specifically, the proposed federal plan requires that an acceptable delegation request must include the following: a demonstration of adequate resources and legal authority to administer and enforce the federal plan (e.g., attorney general's (AG's) opinion²⁴); an inventory of affected SSI units and their air emissions in addition to their compliance schedules; certification and documentation that a public hearing on the delegation request was held; and a commitment to enter into a memorandum of agreement with the EPA Regional Administrator who sets forth the terms, conditions, and effective date of delegation and that serves as the mechanism for the transfer of authority.²⁵

Neither the SSI EG nor the proposed federal plan define "state."

A state's AG's opinion that its air agency has the authority to receive delegation and demonstrate that the rule will be implemented and enforced relative to the designated facilities. If an AG's opinion was previously submitted, the opinion should be updated by the attorney general at the time a new delegation request is submitted to the EPA. The AG's opinion will be crucial because promulgated EG are not written as direct requirements for designated facilities, but rather as requirements for the state to ensure that its state plan or delegation request contains enforceable regulations that are at least as protective as those in the EG. See 40 CFR 60.26 and 40 CFR 62.05 for all provisions that should be addressed in an AG's opinion.

Guidance and information is provided in EPA's "Delegations Manual," Item 7-139, Implementation and Enforcement of 111(d)(2) and 111(d)(2)/129(b)(3) Federal Plans."

"State" is defined in 40 CFR 60.2, however, to mean all non-Federal authorities, including local agencies, interstate associations, and state-wide programs, that have delegated authority to implement: (1) the provisions of the part; and/or (2) the permit program established under part 70 of the chapter. The term state shall have its conventional meaning where clear from the context. Because "state" is not defined in either the SSI EG or proposed federal plan, the broader definition of "state" in 40 CFR 60.2 applies in the SSI federal plan. This is because, as provided in 40 CFR 62.01, all terms not defined therein have the meaning given to them in the CAA and in part 60 of the chapter. Based on the lack of a more specific definition of "state" in the SSI federal plan and the definition of "state" in 40 CFR part 60, we are confirming here that local agencies may directly request delegation of authority to implement the SSI federal plan with respect to sources within their jurisdiction provided they have authority under state law to do so and they have met all the requirements specified in the federal plan for taking delegation. This is in contrast to the situation with state plans implementing EG, in which we believe the request for plan approval must be submitted by the state. 26

The EPA strongly encourages state and local agencies in states that do not submit approvable state plans to request delegation of the federal plan so that they can have primary responsibility for

 $^{^{26}}$ See CAA section 110(a)(2)(e) and CAA section 111(d).

implementing the EG, consistent with the intent of Congress. Approved and effective state plans or delegation of the federal plan is the EPA's preferred outcome because states, tribes, territories, and local agencies not only have the responsibility to carry out the EG, but also have the practical knowledge and enforcement resources critical to achieving the highest rate of compliance. It is generally preferable for state and local agencies to be the implementing agencies. The EPA reiterates that we will do all that we can to expedite delegation of the federal plan to state and local agencies, whenever possible, in cases where states are unable to develop and submit approvable state plans.

COMMENT: One commenter (12) raises concerns regarding the EPA's delay of proposing the federal plan. The commenter specifically states that the delay has exacerbated the difficulties SSI unit owners and operators have faced in implementing the EG, especially given the fact that a majority of states have not chosen to develop their own state plans. The commenter encourages the EPA to move expeditiously to finalize the federal plan.

RESPONSE: The EPA acknowledges this comment.

5. Inventory of Units

COMMENT: One commenter (09) confirms that the EPA has properly identified the two SSI facilities in Minnesota that will be subject to this SSI federal plan. Both facilities are owned and operated by Metropolitan Council Environmental Services, the regional wastewater

treatment system operator for the Twin Cities area.

RESPONSE: The EPA thanks the commenter for confirming the accuracy of the unit inventory for units in their state.

6. Remand

COMMENT: Two commenters (11, 12) raise concerns that the EPA has not yet addressed the remand in the Court Decision NACWA v. EPA. Specifically, commenter (11) believes that the proposed federal plan is ambiguous and confusing and they are in an untenable position to comply. The commenter highlights that this is because of the EPA's delay of issuing the federal plan, issuing associated policy and guidance directives for implementation of the rule, and the EPA's decision to not yet address the remand in the DC Circuit Court decision NACWA v. EPA, 734 F.3d. 1115. Commenter (12) believes that the EPA must address both the issues raised in its May 29, 2014, Petition for Reconsideration and the rule remand in the DC Circuit Court August 2013 decision in NACWA v. EPA, 734 F.3d. 1115. The commenter states that it is inappropriate to issue a final federal plan in the absence of the EPA's response to the remand. The commenter believes that the EPA's failure to address the remand puts approximately 100 utilities in an untenable position: facilities must commit millions of dollars to upgrade their SSI units to comply with emissions standards that the Court has ruled do not clearly meet CAA statutory mandates. The commenter discusses that they outlined further details in their 2014

Petition for Reconsideration that the EPA must either fully address the Court's remand and adjust the final emissions standards as warranted or delay the compliance deadline for the rule to prevent this potentially wasteful expense of taxpayer dollars.

RESPONSE: The EPA disagrees that issuance of the federal plan must be delayed until such time as we address the Court's remand of certain issues in NACWA v. EPA. The Court's remand was solely for the purpose of further explanation of the EPA's methodology. Contrary to one commenter's assertion, the Court did not find that the SSI rule was inconsistent with the CAA. Rather, the Court requested that the EPA better explain how its methodology meets the relevant statutory requirements. Further, the same commenter, which was a party in the NACWA case, requested that the Court vacate the SSI rule, and the Court declined to do so. Therefore, the Court understood and intended that the rule remain in place and that its implementation should move forward while the EPA responds to the remand. For this reason, the EPA also disagrees with the commenter who claimed that the SSI rule requirements are "not even established requirements," since they remain in place.

The EPA also disagrees that the agency must respond to one commenter's 2014 petition for Reconsideration of the SSI rule, submitted following the NACWA decision, before issuing the

federal plan. Nothing in the CAA, and specifically nothing in CAA section 129, suggests that the EPA should postpone promulgation of a rule required to be issued by the CAA by a date certain in order to address a petition for reconsideration. Nor does the commenter point to any such authority. Additionally, the petition at issue requests that the EPA withdraw the SSI rule and instead issue a different rule for SSI units under section 112 of the CAA. The EPA notes that the NACWA decision upheld our authority to regulate SSI units under CAA section 129, against a challenge claiming that the EPA must regulate the units under CAA section 112.

7. Other Comments

COMMENT: One commenter (14) remarks on the interaction of the SSI federal plan and 40 CFR part 503, subpart E. The commenter asks if the federal plan for SSI units will establish different operating limits and reporting requirements that may be different than those established under the Clean Water Act at 40 CFR part 503, subpart E. The commenter requests that the EPA consider a streamlined approach to facilitate a single set of operational parameters for demonstrating compliance.

RESPONSE: This comment is outside the scope of the SSI federal plan. However, the EPA discusses the relationship of the rule to other standards for the use or disposal of sewage sludge and associated air emissions in preamble of the March 21, 2011, EG

and NSPS for SSI units at 76 FR 15375.

COMMENT: One commenter (12) discusses that some SSI units are subject to the standard for particulate matter under 40 CFR part 60, subpart O, which establishes emissions limits, monitoring requirements, and recordkeeping requirements that are different than the guidelines and standards for SSI units under 40 CFR part 60, subparts MMMM and LLLL. The commenter gives the example of the requirement for pressure drop, which is different between subpart O and subparts MMMM and LLLL. Specifically, subpart O pressure drop is a 15-minute average while subpart LLLL is a 12hour average. The commenter is aware of at least one facility that has submitted a request to the EPA to allow the utility to demonstrate compliance with subpart O by demonstrating compliance with subpart LLLL or MMMM. The commenter asks that the EPA clarify whether subpart O is superseded by the requirements of subparts MMMM and LLLL, if both sets of sitespecific limits and reporting requirements apply, and whether a site-specific determination is necessary to avoid having to demonstrate compliance with both sets of requirements independently.

RESPONSE: This comment is outside the scope of the SSI federal plan. 40 CFR part 60, subparts O, MMMM, and LLLL remain in effect in the CFR. Any affected facilities would need to comply with both regulations. For the most part, subparts MMMM and LLLL

are more stringent than subpart O. Generally, if a facility is in compliance with the more stringent of the regulations, it would be in compliance with the other less stringent regulation. The EPA recognizes the differences between subpart O and subparts MMMM and LLLL. However, subparts MMMM and LLLL do not relieve SSI units of complying with subpart O, and therefore an owner/operator of an SSI unit that is affected by subpart MMMM or LLLL and subpart O would need to comply with both. For the scrubber pressure drop example, subpart O does require a much shorter averaging time (15-minute average versus 12-hour average), but a facility would only need to identify when this 15-minute average is 30-percent below the average pressure drop during the performance test. Subparts MMMM and LLLL do not have the 30-percent allowance. Additionally, subparts MMMM and LLLL require data recording at 15-minute intervals, so facilities should already have the 15-minute average. Therefore, we do not believe that it is unreasonable or overly burdensome to comply with both limits.

B. Affirmative Defense to Malfunctions

As proposed, this final action does not include an affirmative defense to malfunction events. In the 2011 SSI rule, the EPA included an affirmative defense that provided that civil penalties would not be assessed if a source demonstrated in a judicial or administrative proceeding that it had met certain requirements. However, in 2014 the Court vacated such an affirmative defense in one of the EPA's CAA

section 112(d) regulations. NRDC v. EPA, 749 F.3d 1055 (D.C. Cir. 2014). The EPA intends to revise the March 21, 2011, SSI EG and NSPS to remove the affirmative defense provision from the EG and NSPS in the future.

V. Summary of Final SSI Federal Plan Requirements

The SSI federal plan requirements are described below. Table 4 lists each element and identifies where it is located or codified.

Table 4. Elements of the Final SSI Federal Plan

Element of the SSI Federal Plan	Location	
Legal authority and enforcement mechanism	Sections 129(b)(3), 111(d),	
	301(a), and 301(d)(4) of the CAA.	
Inventory of affected SSI units	Docket ID No. EPA-HQ-OAR-2012-	
	0319.	
Inventory of emissions	Docket ID No. EPA-HQ-OAR-2012-	
	0319.	
Compliance schedules	40 CFR 62.15875 to 62.15915.	
Emissions limits and operating limits	40 CFR 62.15955 to 62.16010.	
Operator training and qualification	40 CFR 62.15920 to 62.15950.	
Testing, monitoring, recordkeeping and	40 CFR 62.16015 to 62.16040.	
reporting		
Record of public hearings	Docket ID No. EPA-HQ-OAR-2012-	
	0319.	
Progress reports	Section IV.I. at 80 FR 23407.	

A. What are the final applicability requirements?

The EPA finalizes the federal plan applicability requirements as proposed. The federal plan applies to existing SSI units meeting the applicability of 40 CFR 62.15855 through 62.15870 that are located in any state that does not currently have an approved state plan in place by the effective date of this federal plan. Existing SSI units are considered to be all SSI units for which construction commenced

²⁷ See 80 FR 23407.

on or before October 14, 2010. All SSI units for which construction commenced after October 14, 2010, or for which modification commenced after September 21, 2011, are considered "new" sources subject to NSPS emissions limits (40 CFR part 60, subpart LLLL).

The federal plan requirements apply to owners and operators of SSI units (as defined in 40 CFR 62.16045) located at wastewater treatment facilities designed to treat domestic sewage sludge. Two subcategories are defined for existing units: MH incinerators and FB incinerators. The combustion of sewage sludge that is not burned in an SSI unit located at a wastewater treatment facility designed to treat domestic sewage sludge may be subject to other incineration standards under the CAA.

B. What are the final compliance schedules?

The EPA finalizes the compliance date as proposed. The final compliance date remains March 21, 2016. However, as discussed in section IV.A. of this preamble, the EPA is revising this section to require that all SSI unit owners or operators submit a final control plan and achieve compliance by March 21, 2016. (See 40 CFR 62.15875 through 62.15915).

The owner or operator must notify the EPA and permitting authority or delegated authority when they have submitted their final control plan and have come into compliance, as well as when and if these requirements are missed. The notification must identify the requirement and the date the requirement is achieved (or missed). If

an owner or operator misses the deadline, the owner or operator must also notify the EPA and permitting authority or delegated authority when the requirement is achieved. The owner or operator must submit the notification to the applicable EPA regional office and permitting authority or delegated authority within 10 business days after the date that is defined in the federal plan. (See Table 3 under section II.C. of this preamble for a list of EPA regional offices.)

The definition of each requirement, along with its required completion date, follows.

Submit Final Control Plan. To meet this requirement, the owner or operator of each SSI unit must submit a plan that includes a description of the devices for air pollution control and process changes that will be used to comply with the emissions limits and standards and other requirements of this subpart, a description of the type(s) of waste to be burned (if other than sewage sludge is burned in the unit), the maximum design sewage sludge burning capacity, and, if applicable, the petition for site-specific operating limits under 40 CFR 62.15965. A copy of the final control plan must be maintained onsite. A final control plan is not required for units that will be shut down prior to the final control plan submittal date.

Completion date: March 21, 2016.

<u>Final Compliance</u>. To be in final compliance means to complete all process changes and retrofit construction of control devices as

specified in the final control plan, so that if the SSI unit is brought online, all necessary process changes and air pollution control devices are operating as designed.

Completion date: March 21, 2016.

Consistent with CAA section 129(f)(3), an SSI unit which does not achieve final compliance by March 21, 2016, would be in violation of the federal plan and subject to enforcement action. See Section VI of this preamble which discusses SSI units that have shut down or will shut down. The discussion in those sections includes an explanation of requirements for units if they plan to permanently close, units that have been rendered inoperable, and units that have shut down but plan to restart before or after the compliance date.

C. What are the final emissions limits and operating limits?

The EPA finalizes the emissions and operating limits as proposed. These limits remain the same as the limits in the 2011 EG. Table 5 of this preamble summarizes the EG emissions limits promulgated. Existing sources may comply with either the PCDD/PCDF toxicity equivalence or total mass balance emission limits. These standards apply at all times. Facilities will be required to establish site-specific operating limits derived from the results of performance testing. The site-specific operating limits are established as the minimum (or maximum, as appropriate) operating parameter value measured during the performance test. These operating limits will result in achievable operating ranges that will ensure

that the control devices used for compliance will be operated to achieve continuous compliance with the emissions limits. Further discussion on performance testing can be found in section V.D. of this preamble.

TABLE 5. Summary of EG Emissions Limits Promulgated For Existing SSI

			<u> </u>
		Emission	Emission
		Limit For MH	Limit For FB
Pollutant	Units	Incinerators	Incinerators
Cd	milligrams per	0.095	0.0016
	dry standard		
	cubic meter @		
	7-percent		
	oxygen		
СО	parts per	3,800	64
	million of dry		
	volume @ 7-		
	percent oxygen		
HCl	parts per	1.2	0.51
	million of dry		
	volume @ 7-		
	percent oxygen		
Нд	mg/dscm @ 7-	0.28	0.037
	percent oxygen		
NOX	parts per	220	150
	million of dry		
	volume @ 7-		
	percent oxygen		
Pb	milligrams per	0.30	0.0074
	dry standard		
	cubic meter @		
	7-percent		
	oxygen		
PCDD/PCDF,	nanograms per	0.32	0.10

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		Emission	Emission
		Limit For MH	Limit For FB
Pollutant	Units	Incinerators	Incinerators
Toxicity	dry standard		
Equivalence	cubic meter @		
(TEQ)	7-percent		
	oxygen		
PCDD/PCDF,	nanograms per	5.0	1.2
Total Mass	dry standard		
Basis (TMB)	cubic meter @		
	7-percent		
	oxygen		
PM	milligrams per	80	18
	dry standard		
	cubic meter @		
	7-percent		
	oxygen		
so ₂	parts per	26	15
	million of dry		
	volume @ 7-		
	percent oxygen		
Fugitive	Percent of the	Visible	Visible
emissions	hourly	emissions of	emissions of
from ash	observation	combustion	combustion
handling	period	ash from an	ash from an
		ash conveying	ash
		system	conveying
		(including	system
		conveyor	(including
		transfer	conveyor
		points) for	transfer
		no more than	points) for
		5 percent of	no more than
		any	5 percent of
		compliance	any
		test hourly	compliance

		Emission Limit For MH	Emission Limit For FB
Pollutant	Units	Incinerators	Incinerators
		observation	test hourly
		period	observation
			period

D. What are the final performance testing and monitoring requirements?

The EPA finalizes the performance testing and monitoring provisions as proposed. The following paragraphs list a number of testing and monitoring requirements in the 2011 EG that are being finalized in the SSI federal plan.

1. Performance Testing

The performance testing provisions reflect those in the SSI EG.

The federal plan requires all existing SSI units to demonstrate initial and annual compliance with the emission limits using EPA-approved emission test methods. Additionally, there is an option for less frequent testing if sources demonstrate that their emissions of regulated pollutants are below thresholds of the emission limits.

This federal plan requires initial and annual emissions performance tests (or continuous emissions monitoring or continuous sampling as an alternative), bag leak detection systems for fabric filter (FF) controlled units, and continuous parameter monitoring, if they are used to meet the emission limits. All SSI units are also required to conduct initial and annual inspections of air pollution control devices. Additional monitoring includes the Method 22 (see 40)

CFR part 60, appendix A-7) visible emissions test of the ash handling operations during each compliance test to demonstrate compliance with the visible emissions limit. For existing SSI units, use of Cd, CO, HCl, NO_X , PM, Pb or SO_2 CEMS; Integrated Sorbent Trap Mercury Monitoring System (ISTMMS); and Integrated Sorbent Trap Dioxin Monitoring System (ISTDMS) (continuous sampling with periodic sample analysis) are approved alternatives to parametric monitoring and annual compliance testing.

The federal plan allows sources to use results of their previous emissions tests to meet the initial compliance performance test requirement if those tests were conducted within the 2 previous years and were conducted under the same conditions. The operating limits established during the most recent performance test that demonstrated initial compliance with the emissions limits must be met.

The federal plan incorporates by reference three alternatives to the EPA reference test methods as shown in Table 6 below.

TABLE 6. List of incorporation by reference.

Test Method	Publisher	IBR in 40 CFR Part 62, Subpart LLL
ANSI/ASME PTC 19.10- 1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]	Available for purchase from the American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990, https://www.asme.org/.	\$62.16015(b)(4)(vii)and (viii), (b)(5)(i), and Tables 2 and 3 to subpart LLL

Test Method	Publisher	IBR in 40 CFR Part 62, Subpart LLL
ASTM D6784-02 (Reapproved 2008) Standard Test Method for Elemental, Oxidized, Particle- Bound and Total Mercury in Flue Gas Generated from Coal- Fired Stationary Sources (Ontario Hydro Method), approved April 1, 2008	Available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106, http://www.astm.org/.	§62.16015(b)(4)(v) and Tables 2 and 3 to subpart LLL
OAQPS Fabric Filter Bag Leak Detection Guidance, EPA-454/R- 98-015, September 1997	Available from the U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, (202) 272-0167, http://www.epa.gov.	§62.15995(b)(3)

These tests are discussed further in section IX.I. of this preamble, titled "National Technology Transfer and Advancement Act (NTTAA)."

2. Monitoring

Monitoring of operating limits can be used to indicate whether air pollution control equipment and practices are functioning properly to minimize air pollution. The 2011 EG and the federal plan include the following parameter monitoring requirements for good combustion, wet scrubbers, afterburners, electrostatic precipitators (ESP), activated carbon injection (ACI) or FF:

- All units must establish a minimum operating temperature or afterburner temperature, site-specific operating requirements for fugitive ash, and monitor feed rate and moisture content of the sludge.
- If using a scrubber to comply with the emissions limits for PM,

- Pb and Cd, continuously monitor minimum pressure drop.
- If using a scrubber to comply with any of the emissions limits, continuously monitor minimum scrubber liquid flow rate.
- ullet If using a scrubber to comply with the emissions limits for SO_2 or HCl, continuously monitor minimum scrubber liquid pH.
- If using an afterburner to comply with the emissions limits, continuously monitor the minimum temperature of the afterburner combustion chamber.
- If using an ESP to comply with PM, Pb and Cd emissions limits, continuously monitor minimum power input to the ESP collection plates. Power input must be calculated as the product of the secondary voltage and secondary amperage to the ESP collection plates. Both the secondary voltage and secondary amperage must be recorded during the performance test.
- If using an ESP to comply with PM, Pb and Cd emissions limits,
 monitor hourly minimum effluent water flow rate at the outlet of the ESP.
- If using ACI to comply with the emissions limits, monitor hourly minimum Hg sorbent inject rate, minimum PCDD/PCDF sorbent injection rate, and continuously monitor minimum carrier gas flow rate or minimum carrier gas pressure drop for the applicable emission limit.
- If using a FF, install a bag leak detection system and operate the bag leak detection system such that the alarm does not sound

more than 5-percent of the operating time during a 6-month period.

• If using something other than a wet scrubber, ESP, ACI, FF or afterburner, petition the Administrator for other site-specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and continuously thereafter.

Owners or operators are not required to establish operating limits for the operating parameters for a control device if a CMS is used to demonstrate compliance with the emissions limits.

3. Electronic Data Submittal

The EPA is finalizing as proposed that owners and operators of SSI units are required to submit electronic copies of certain required performance test reports through the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI). This mirrors the 2011 EG for SSI units. As stated in the proposed preamble, electronic submittal of the reports addressed in this rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability, will further assist in the protection of public health and the environment and will ultimately result in less burden on the regulated community. Electronic reporting can also eliminate paperbased, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data

reporting errors and providing data quickly and accurately to the affected facilities, air agencies, the EPA and the public.

As mentioned in the preamble of the proposal, the EPA Web site that stores the submitted electronic data, WebFIRE, will be easily accessible and will provide a user-friendly interface that any stakeholder could access. By making the records, data and reports addressed in this rulemaking readily available, the EPA, the regulated community and the public will benefit when the EPA conducts its CAA-required technology and risk-based reviews. As a result of having reports readily accessible, our ability to carry out comprehensive reviews will be increased and achieved within a shorter period of time.

We anticipate fewer or less substantial information collection requests (ICRs) in conjunction with prospective CAA-required technology and risk-based reviews may be needed. We expect this to result in a decrease in time spent by industry to respond to data collection requests. We also expect the ICRs to contain less extensive stack testing provisions, as we will already have stack test data electronically. Reduced testing requirements would be a cost savings to industry. The EPA should also be able to conduct these required reviews more quickly. While the regulated community may benefit from a reduced burden of ICRs, the general public benefits from the agency's ability to provide these required reviews more quickly, resulting in increased public health and environmental

protection.

Air agencies could benefit from more streamlined and automated review of the electronically submitted data. Having reports and associated data in electronic format will facilitate review through the use of software "search" options, as well as the downloading and analyzing of data in spreadsheet format. The ability to access and review air emission report information electronically will assist air agencies to more quickly and accurately determine compliance with the applicable regualtions, potentially allowing a faster response to violations which could minimize harmful air emissions. This benefits both air agencies and the general public.

For a more thorough discussion of electronic reporting required by this rule, see the discussion in the preamble of the proposal. In summary, in addition to supporting regulation development, control strategy development, and other air pollution control activities, having an electronic database populated with performance test data will save industry, air agencies, and the EPA significant time, money, and effort while improving the quality of emission inventories, air quality regulations, and enhancing the public's access to this important information.

E. What are the final recordkeeping and reporting requirements?

The EPA finalizes the recordkeeping and reporting requirements as proposed. These requirements reflect those finalized in the 2011 EG. The federal plan requires that records of all initial and all

subsequent stack or performance specification (PS) tests, deviation reports, operating parameter data, continuous monitoring data, maintenance and inspections of air pollution control devices, monitoring plan, and operator training and qualification must be maintained for 5 years. The results of the stack tests and PS test and values for operating parameters are required to be included in initial and subsequent compliance reports. Any incident of deviation, resumed operation following shutdown, force majeure, intent to stop or start use of CMS, and intent of conducting or rescheduling a performance test are required to be reported to the Administrator. Furthermore, final compliance reports are required following the completion of each requirement and identifying any missed requirement. See section V.B of this preamble for a more detailed discussion of the compliance schedules.

F. What other requirements is the EPA finalizing?

The EPA finalizes other requirements as proposed. First, owners and operators of existing SSI units are required to meet operator training and qualification requirements, which include: Ensuring that at least one operator or supervisor per facility complete the operator training course, that qualified operator(s) or supervisor(s) complete an annual review or refresher course specified in the regulation and that they maintain plant-specific information, updated annually, regarding training.

Second, owners or operators of existing SSI units are required

to submit a monitoring plan for any CMS or bag leak detection system used to comply with the rule. Third, they must also submit a monitoring plan for their ash handling system that specifies the operating procedures they will follow to ensure that they meet the fugitive ash emissions limit.

VI. SSI Units That Have or Will Shut Down

A. Units That Plan to Close

The federal plan establishes that if owners or operators plan to permanently close currently operating SSI units, they must do so and submit a closure notification to the Administrator by the date the final control plan is due. The requirements for closing an SSI unit will be set forth at 40 CFR 62.15915, subpart LLL. The requirements to close an SSI unit also apply to "mothballed unit" or inactive unit situations which a unit does not operate and is not rendered inoperable. Until such time as a unit is permanently closed, it must comply with any applicable requirements of the federal plan. In addition, while still in operation, the SSI unit is subject to the same requirements for title V operating permits that apply to units that will not shut down.

B. Inoperable Units

The federal plan provides that in cases where an SSI unit has already shut down permanently and has been rendered inoperable (e.g., waste charge door is welded shut, stack is removed, combustion air blowers removed, burners or fuel supply appurtenances are removed),

the SSI unit may be left off the source inventory in a state plan or this proposed federal plan. An SSI unit that has been rendered inoperable would not be covered by the federal plan.

C. SSI Units That Have Shut Down

The unit inventory for this federal plan includes any SSI unit that are known to have already shut down (but are not known to be inoperable).

1. Restarting Before the Final Compliance Date

If the owner or operator of an inactive SSI unit plans to restart before the final compliance date, the owner or operator must submit the final control plan and achieve final compliance by the final date specified in the federal plan. Final compliance is required for all pollutants and all SSI units no later than the final compliance date, March 21, 2016.

2. Restarting After the Final Compliance Date

As proposed, if the owner or operator of an SSI unit closes the SSI unit, but restarts the unit after the final compliance date of March 21, 2016, the owner or operator must complete emission control retrofits and meet the emissions and operating limits on the date the SSI unit restarts operation. Within 6 months of the unit startup, operator(s) of these SSI units would have to complete the operator training and qualification requirements. Within 60 days of installing an air pollution control device, operator(s) must conduct a unit inspection. Performance testing to demonstrate initial compliance

would also be required as described at 40 CFR 62.15980. An SSI unit that operates out of compliance after the final compliance date would be in violation of the federal plan and subject to enforcement action.

VII. Implementation of the Federal Plan and Delegation

A. Background of Authority

Under sections 111(d) and 129(b) of the CAA, the EPA is required to adopt EG that are applicable to existing solid waste incineration units. These EG are fully implemented when the EPA approves a state plan or adopts a federal plan that implements and enforces the EG. As discussed above, the federal plan regulates SSI units in states that do not have approved plans in effect to implement the EG.

Congress has determined that the primary responsibility for air pollution prevention and control rests with state and local agencies. (See section 101(a)(3) of the CAA.) Consistent with that overall determination, Congress established sections 111 and 129 of the CAA with the intent that the state and local agencies take the primary responsibility for ensuring that the emissions limitations and other requirements in the EG are achieved. Also, in section 111(d) of the CAA, Congress explicitly required that the EPA establish procedures that are similar to those under CAA section 110(c) for state implementation plans. Although Congress required the EPA to propose and promulgate a federal plan for states that fail to submit approvable state plans on time, states may submit plans after

promulgation of the SSI federal plan. The EPA strongly encourages states that are unable to submit approvable plans to request delegation of the federal plan so that they can have primary responsibility for implementing the revised EG, consistent with the intent of Congress.

Approved and effective state plans or delegation of the federal plan to state, tribal, and local agencies is the EPA's preferred outcome because state, tribal, and local agencies not only have the responsibility to carry out the revised EG, but also have the practical knowledge and enforcement resources critical to achieving the highest rate of compliance. It is generally preferable for the state and local agencies to be the implementing agency. For these reasons, the EPA will do all that it can to expedite delegation of the federal plan to state, tribal, and local agencies, whenever possible, in cases where states are unable to develop and submit approvable state plans.

B. Mechanisms for Transferring Authority

There are two mechanisms for transferring implementation authority to state, tribal, and local agencies: (1) The EPA approval of a state plan after the federal plan is in effect; and (2) if a state does not submit or obtain approval of its own plan, the EPA delegation to a state, tribe, or local of the authority to implement certain portions of this federal plan to the extent appropriate and if allowed by state law. Both of these options are described in more

detail below.

1. Federal Plan Becomes Effective Prior to Approval of a State Plan

After SSI units in a state become subject to the federal plan, the state or tribal agency may still adopt and submit a state or tribal plan to the EPA. If the EPA determines that the state or tribal plan is as protective as the EG, the EPA will approve the state or tribal plan. If the EPA determines that the plan is not as protective as the EG, the EPA will partially approve or disapprove the plan (or portion of the plan) and the SSI units covered in the plan would remain subject to the federal plan until a plan covering those SSI units is approved and effective. Prior to disapproval, the EPA will work with states and tribes to attempt to reconcile areas of the plan that remain not as protective as the EG.

Upon the effective date of a state or tribal plan, the federal plan would no longer apply to SSI units covered by such a plan and the state, tribe, territory, or local agency would implement and enforce the state plan in lieu of the federal plan. When an EPA regional office approves a state or tribal plan, it will amend the appropriate subpart of 40 CFR part 62 to indicate such approval.

2. State, Tribe, Territory, or Local Takes Delegation of the Federal Plan

The EPA, in its discretion, may delegate to state, tribe, territorial, or local agencies the authority to implement this federal plan. As discussed above, the EPA has concluded that it is

advantageous and the best use of resources for states, tribes, territories, or local agencies to agree to undertake, on the EPA's behalf, administrative and substantive roles in implementing the federal plan to the extent appropriate and where authorized by state, tribal, territorial or local law. If a state, tribe, territory, or local requests delegation, the EPA will generally delegate the entire federal plan to the state, tribe, territory, or local agency. These functions include administration and oversight of compliance reporting and recordkeeping requirements, SSI unit inspections and preparation of draft notices of violation, but will not include any authorities retained by the EPA. Agencies that have taken delegation, as well as the EPA, will have responsibility for bringing enforcement actions against sources violating federal plan provisions.

C. Implementing Authority

The EPA Regional Administrators have been delegated the authority for implementing the SSI federal plan. All reports required by the federal plan should be submitted to the appropriate Regional Administrator. Section II.C of this preamble includes Table 3 that lists names and addresses of the EPA regional office contacts and the states they cover.

D. Delegation of the Federal Plan and Retained Authorities

If a state, tribe, territory, or local agency intends to take delegation of the federal plan, the state, tribe, territory, or local agency should submit to the appropriate EPA regional office a written

request for delegation of authority. The state, tribe, territory, or local agency should explain how it meets the criteria for delegation. See generally "Good Practices Manual for Delegation of NSPS and NESHAP" (EPA, February 1983). The letter requesting delegation of authority to implement the federal plan should: (1) demonstrate that the state, tribe, territory, or local agency has adequate resources, as well as the legal and enforcement authority to administer and enforce the program, (2) include an inventory of affected SSI units, which includes those that have ceased operation, but have not been dismantled or rendered inoperable, include an inventory of the affected units' air emissions and a provision for state progress reports to the EPA, (3) certify that a public hearing is held on the state, tribe, territory, or local agency delegation request, and (4) include a memorandum of agreement between the state, tribe, territory, or local agency and the EPA that sets forth the terms and conditions of the delegation, the effective date of the agreement and the mechanism to transfer authority. Upon signature of the agreement, the appropriate EPA regional office would publish an approval notice in the Federal Register, thereby incorporating the delegation of authority into the appropriate subpart of 40 CFR part 62.

If authority is not delegated to a state, tribe, territory, or local agency the EPA will implement the federal plan. Also, if a state, tribe, territory, or local agency fails to properly implement a delegated portion of the federal plan, the EPA will assume direct

implementation and enforcement of that portion. The EPA will continue to hold enforcement authority along with the state, tribe, territory, or local agency even when the agency has received delegation of the federal plan. In all cases where the federal plan is delegated, the EPA will retain and will not transfer authority to a state, tribe, or local to approve the following items promulgated in the 2011 EG and NSPS:

- 1. Alternatives to the emissions limits in Table 5 of this document
 - 2. Approval of major alternatives to monitoring;
- 3. Approval of major alternatives to recordkeeping and reporting;
- 4. Alternative site-specific operating parameters established by facilities using controls other than a scrubber, ESP, afterburner, ACI or FF;
- 5. Approval of operation of an SSI unit and receipt of status reports when a qualified operator is not accessible for 2 weeks or more; and
- 6. Performance test and data reduction waivers under 40 CFR 60.8(b).

SSI unit owners or operators who wish to petition the agency for any alternative requirement should submit a request to the Regional Administrator with a copy sent to the appropriate state.

VIII. Title V Operating Permits

All existing SSI units regulated under state, tribal, or federal plans implementing the 2011 EG must apply for and obtain a title V permit. These title V operating permits assure compliance with all applicable requirements for regulated SSI units, including all applicable CAA section 129 requirements.²⁸

The permit application deadline for a CAA section 129 source applying for a title V operating permit depends on when the source first becomes subject to the relevant title V permits program. For example, if the SSI unit is an existing unit and is not subject to an earlier permit application deadline, the source must submit a complete title V permit application by the earliest of the following dates:

- Twelve months after the effective date of any applicable EPA-approved CAA sections 111(d)/129 plan (i.e., approved state or tribal plan that implements the SSI EG); or
- Twelve months after the effective date of any applicable federal plan; or
- Thirty-six months after promulgation of 40 CFR part 60, subpart MMMM (i.e., March 21, 2014).

For any existing SSI unit not subject to an earlier permit application deadline, the application deadline of March 21, 2014, applies regardless of whether or when any applicable federal plan is effective, or whether or when any applicable CAA sections 111(d)/129 plan is approved by the EPA and becomes effective. (See CAA sections 129(e), 503(c), 503(d), 502(a), and 40 CFR 70.5(a)(1)(i) and

²⁸ 40 CFR 70.2, 70.6(a)(1), 71.2, and 71.6(a)(1).

71.5(a)(1)(i).

If the SSI unit is subject to title V as a result of some triggering requirement(s) other than those mentioned above (for example, an SSI unit may be a major source or part of a major source), then the owner/operator of the source may be required to apply for a title V permit prior to the deadlines specified above. If more than one requirement triggers a source's obligation to apply for a title V permit, the 12-month time frame for filing a title V permit application is triggered by the requirement which first causes the source to be subject to title V.²⁹

For more background information on the interface between CAA section 129 and title V, including the EPA's interpretation of CAA section 129(e), as well as information on submitting title V permit applications, updating existing title V permit applications and reopening existing title V permits, see the final federal plan for Commercial and Industrial Solid Waste Incinerators, October 3, 2003 (68 FR 57518, 57532). See also the final federal plan for Hospital Medical Infectious Waste Incinerators, August 15, 2000 (65 FR 49868, 49877).

A. Title V and Delegation of a Federal Plan

As noted previously, issuance of a title V permit is not equivalent to the approval of a state or tribal plan or delegation of

CAA Section 503(c) and 40 CFR 70.3(a) and (b), 70.5(a)(1)(i), 71.3(a) and (b) and 71.5(a)(1)(i).

a federal plan. 30 Legally, delegation of a standard or requirement results in a delegated state, local, or tribe standing in for the EPA as a matter of federal law. This means that obligations a source may have to the EPA under a federally promulgated standard become obligations to a state, tribe, or local (except for functions that the EPA retains for itself) upon delegation. 31 Although a state, local, or tribe may have the authority under state, local, or tribal law to incorporate CAA section 111/129 requirements into its title V permits, and implement and enforce these requirements in these permits without first taking delegation of the CAA section 111/129 federal plan, the state, local, or tribe is not standing in for the EPA as a matter of federal law in this situation. Where a state, local, or tribe does not take delegation of a section 111/129 federal plan, obligations that a source has to the EPA under the federal plan continue after a title V permit is issued to the source. As a result, the EPA continues to maintain that an approved 40 CFR part 70 operating permits program cannot be used as a mechanism to transfer the authority to implement and enforce the federal plan from the EPA to a state, local, or tribe.

³⁰ See, e.g., the 'Title V and Delegation of a Federal Plan' section of the proposed federal plan for Commercial Industrial Solid Waste Incinerators (CISWI), November 25, 2002 (67 FR 70640, 70652). The preamble language from this section in the proposed federal plan for CISWI was reaffirmed in the final federal plan for CISWI, October 3, 2003 (68 FR 57518, 57535).

³¹ If the Administrator chooses to retain certain authorities under a standard, those authorities cannot be delegated, e.g., alternative methods of demonstrating compliance.

As mentioned above, a state, local, or tribe may have the authority under state, local, or tribal law to incorporate CAA section 111/129 requirements into its title V permits, and implement and enforce these requirements in that context without first taking delegation of the CAA section 111/129 federal plan. 32 Some states, locals, or tribes, however, may not be able to implement and enforce a CAA section 111/129 standard in a title V permit under state, local, or tribal law until the CAA section 111/129 standard has been delegated. In these situations, a state, local, or tribe should not issue a 40 CFR part 70 permit to a source subject to a federal plan before taking delegation of the section 111/129 federal plan.

However, if a state or tribe can provide an AG's opinion delineating its authority to incorporate CAA section 111/129 requirements into its title V permits, and then implement and enforce these requirements through its title V permits without first taking delegation of the requirements, then a state, local, or tribe does not need to take delegation of the CAA section 111/129 requirements for purposes of title V permitting. 33 In practical terms, without

The EPA interprets the phrase 'assure compliance' in CAA section 502(b)(5)(A) to mean that permitting authorities will implement and enforce each applicable standard, regulation or requirement which must be included in the title V permits the permitting authorities issue. See definition of 'applicable requirement' in 40 CFR 70.2. See also 40 CFR 70.4(b)(3)(i) and 70.6(a)(1).

³³ It is important to note that an AG's opinion submitted at the time of initial title V program approval is sufficient if it demonstrates that a state or tribe has adequate authority to incorporate CAA

approval of a state or tribal plan, delegation of a federal plan, or an adequate AG's opinion, states, locals, and tribes with approved 40 CFR part 70 permitting programs open themselves up to potential questions regarding their authority to issue permits containing CAA section 111/129 requirements and to assure compliance with these requirements. Such questions could lead to the issuance of a notice of deficiency for a state's or tribe's 40 CFR part 70 program. As a result, prior to a state, local, or tribal permitting authority drafting a part 70 permit for a source subject to a CAA section 111/129 federal plan, the state, local, or tribe, the EPA regional office and source in question are advised to ensure that delegation of the relevant federal plan has taken place or that the permitting authority has provided to the EPA regional office an adequate AG's opinion.

In addition, if a permitting authority chooses to rely on an AG's opinion and not take delegation of a federal plan, a CAA section 111/129 source subject to the federal plan in that state must simultaneously submit to both the EPA and the state, local, or tribe all reports required by the standard to be submitted to the EPA. Given that these reports are necessary to implement and enforce the CAA section 111/129 requirements when they have been included in

section 111/129 requirements into its title V permits and to implement and enforce these requirements through its title V permits without delegation.

title V permits, the permitting authority needs to receive these reports at the same time as the EPA.

In the situation where a permitting authority chooses to rely on an AG's opinion and not take delegation of a federal plan, the EPA regional offices will be responsible for implementing and enforcing CAA section 111/129 requirements outside of any title V permits.

Moreover, in this situation, the EPA regional offices will continue to be responsible for developing progress reports and conducting any other administrative functions required under this federal plan or any other CAA section 111/129 federal plan. See, e.g., section V.B of this preamble titled "What are the final compliance schedules?".

It is important to note that the EPA is not using its authority under 40 CFR 70.4(i)(3) to request that all states, locals, and tribes which do not take delegation of this federal plan submit supplemental AG's opinions at this time. However, the EPA regional offices shall request, and permitting authorities shall provide, such opinions when the EPA questions a state's or tribe's authority to incorporate CAA section 111/129 requirements into a title V permit and implement and enforce these requirements in that context without delegation.

IX. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at http://www2.epa.gov/laws-regulations/laws-and-executive-orders.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget for review.

B. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA. This action rather finalizes the SSI federal plan to implement the EG adopted on March 21, 2011, 34 for those states that do not have a state plan implementing the EG.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. EG for owners of existing SSI units were established by the March 21, 2011, final rule (76 FR 15372), and that rule was certified as not having a significant economic impact on a substantial number of small entities. This action establishes a federal plan to implement and enforce those requirements in those states that do not have their own EPA-approved state plan for implementing and enforcing the requirements.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million

³⁴ See 76 FR 15372, March 21, 2011.

or more as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty or any state, local, or tribal government or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. The EPA is not aware of any SSI units owned or operated by Indian tribal governments. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental

health risk or safety risk.

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Orders 12866.

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution or use of energy.

I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards. Please reference Table 6 of this preamble for the locations where these standards are available. The EPA has decided to use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," for its manual methods of measuring the oxygen or carbon dioxide content of the exhaust gas. These parts of ASME PTC 19.10-1981 are acceptable alternatives to EPA Methods 6, 7 for the manual procedures only. The EPA determined that this standard is reasonably available because it is available for purchase. Another voluntary consensus standards (VCS), ASTM D6784-02 (Reapproved 2008),

"Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)" for its manual method of measuring mercury is an acceptable alternative to Method 29 and 30B. The EPA determined that this standard is reasonably available because it is available for purchase. The EPA further determined to use OAQPS Fabric Filter Bag Leak Detection Guidance, EPA-454/R-98-015, September 1997, for its guidance on the use of tiboelectic monitors as bag leak detectors for a fabric filter air pollution control device and monitoring system decriptions, selection, installation, set up, adjustment, operation, and quality assurance procedures. The EPA determined that this standard is reasonably available because it is freely available from the EPA. Lastly, the EPA decided to use EPA Methods 5, 6, 6C, 7, 7E, 9, 10, 10A, 10B, 22, 23, 26A, 29 and 30B. No VCS were found for EPA Method 9 and 22.

While the EPA has identified 23 VCS as being potentially applicable to the rule, we have decided not to use these VCS in this rulemaking. The use of these VCS would be impractical because they do not meet the objectives of the standards cited in this rule. See the docket for the 2011 EG (Docket ID No. EPA-HQ-OAR-2009-0539), which is being implemented under this action, for the reason for these determinations.

Under 40 CFR 62.16050, the EPA Administrator retains the authority of approving alternate methods of demonstrating compliance

as established under 40 CFR 60.8(b) and 40 CFR 60.13(i), subpart A (NSPS General Provisions). A source may apply to the EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required EPA test methods, performance specifications, or procedures.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA has concluded that the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income, or indigenous populations. This finding is based on an analysis of demographic data conducted for the 2011 EG. This federal plan implements the 2011 EG. The previous analysis of demographic data showed that the average of populations in close proximity to the sources, and, thus, most likely to be effected by the sources, were similar in demographic composition to national averages. The results of the demographic analysis are presented in Review of Environmental Justice Impacts, June 2010, a copy of which is available in the SSI docket (EPA Docket Identification Number EPA-HQ-OAR-2009-0559). This final federal plan implements national standards in the 2011 EG that would result in reduction in emissions of many of the listed Hazardous Air Pollutants emitted from this source. This includes emissions of Cd, HCl, Pb, and Hg. Other emissions reductions include reductions of criteria

pollutants such as CO, NOx, PM and $PM_{2.5}$ microns or less, and SO_2 . SO_2 and NO_X are precursors for the formation of $PM_{2.5}$ and NO_X is a precursor for ozone. Reducing these emissions will decrease the amount of such pollutants to which all affected populations are exposed.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

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List of Subjects in 40 CFR Part 62

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: February 22, 2016.

Gina McCarthy,

Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 62 of the Code of Federal Regulations (CFR) is amended as follows:

PART 62-APPROVAL AND PROMULGATION OF STATE PLANS FOR DESIGNATED FACILITIES AND POLLUTANTS

1. The authority citation for part 62 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart KKK [Added and Reserved]

- 2. Add and reserve subpart KKK.
- 3. Add subpart LLL to read as follows:

Subpart LLL-- Federal Plan Requirements for Sewage Sludge
Incineration Units Constructed on or Before October 14, 2010
Applicability

Sec.

- 62.15855 Am I subject to this subpart?
- 62.15860 What SSI units are exempt from the federal plan?
- 62.15865 How do I determine if my SSI unit is covered by an approved and effective state or tribal plan?
- 62.15870 If my SSI unit is not listed on the federal plan inventory, am I exempt from this subpart?

Compliance Schedules

- 62.15875 What is my final compliance date?
- 62.15880 [Reserved]
- 62.15885 What must I include in the notifications of achievement of

compliance?

- 62.15890 When must I submit the notifications of achievement of compliance?
 - 62.15895 What if I do not meet the compliance date?
- 62.15900 How do I comply with the requirement for submittal of a control plan?
 - 62.15905 How do I achieve final compliance?
 - 62.15910 What must I do if I close my SSI unit and then restart it?
- 62.15915 What must I do if I plan to permanently close my SSI unit and not restart it?

Operator Training and Qualification

- 62.15920 What are the operator training and qualification requirements?
 - 62.15925 When must the operator training course be completed?
 - 62.15930 How do I obtain my operator qualification?
 - 62.15935 How do I maintain my operator qualification?
 - 62.15940 How do I renew my lapsed operator qualification?
- 62.15945 What if all the qualified operators are temporarily not accessible?
- 62.15950 What site-specific documentation is required and how often must it be reviewed by qualified operators and plant personnel?

Emission Limits, Emission Standards and Operating Limits and Requirements

- 62.15955 What emission limits and standards must I meet and by when?
- 62.15960 What operating limits and requirements must I meet and by when?
 - 62.15965 How do I establish operating limits if I do not use a wet

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- scrubber, fabric filter, electrostatic precipitator, activated carbon injection, or afterburner, or if I limit emissions in some other manner, to comply with the emission limits?
- 62.15970 Do the emission limits, emission standards, and operating limits apply during periods of startup, shutdown, and malfunction?
 - 62.15975 [Reserved]

Initial Compliance Requirements

- 62.15980 How and when do I demonstrate initial compliance with the emission limits and standards?
 - 62.15985 How do I establish my operating limits?
- 62.15990 By what date must I conduct the initial air pollution control device inspection and make any necessary repairs?
- 62.15995 How do I develop a site-specific monitoring plan for my continuous monitoring, bag leak detection, and ash handling systems, and by what date must I conduct an initial performance evaluation?

Continuous Compliance Requirements

- 62.16000 How and when do I demonstrate continuous compliance with the emission limits and standards?
- 62.16005 How do I demonstrate continuous compliance with my operating limits?
- 62.16010 By what date must I conduct annual air pollution control device inspections and make any necessary repairs?

Performance Testing, Monitoring, and Calibration Requirements

- 62.16015 What are the performance testing, monitoring, and calibration requirements for compliance with the emission limits and standards?
- 62.16020 What are the monitoring and calibration requirements for compliance with my operating limits?

Recordkeeping and Reporting

- 62.16025 What records must I keep?
- 62.16030 What reports must I submit?

Title V Operating Permits

- 62.16035 Am I required to apply for and obtain a title V operating permit for my existing SSI unit?
- 62.16040 When must I submit a title V permit application for my existing SSI unit?

Definitions

62.16045 What definitions must I know?

Delegation of Authority

62.16050 What authorities will be retained by the EPA Administrator?

Table 1 to Subpart LLL of Part 62—Compliance Schedule for Existing Sewage Sludge Incineration Units

Table 2 to Subpart LLL of Part 62-Emission Limits and Standards for Existing Fluidized Bed Sewage Sludge Incineration Units

Table 3 to Subpart LLL of Part 62-Emission Limits and Standards for Existing Multiple Hearth Sewage Sludge Incineration Units

Table 4 to Subpart LLL of Part 62-Operating Parameters for Existing Sewage Sludge Incineration Units

Table 5 to Subpart LLL of Part 62-Toxic Equivalency Factors

Table 6 to Subpart LLL of Part 62-Summary of Reporting Requirements for Existing Sewage Sludge Incineration Units

Subpart LLL-- Federal Plan Requirements for Sewage Sludge

Incineration Units Constructed on or Before October 14, 2010

Applicability

§ 62.15855 Am I subject to this subpart?

- (a) You are subject to this subpart if your SSI unit meets all three criteria described in paragraphs (a)(1) through (3) of this section.
- (1) You own or operate an SSI unit(s) that commenced construction on or before October 14, 2010.
- (2) You own or operate an SSI unit(s) that meet the definition of an SSI unit as defined in § 62.16045.
- (3) You own or operate an SSI unit(s) not exempt under § 62.15860.
- (b) If you own or operator an SSI unit(s) and make changes that meet the definition of modification after September 21, 2011, the SSI unit becomes subject to 40 CFR part 60, subpart LLLL, and the federal plan no longer applies to that unit.
- (c) If you own or operate an SSI unit(s) and make physical or operational changes to the SSI unit(s) for which construction commenced on or before September 21, 2011 primarily to comply with the federal plan, 40 CFR part 60, subpart LLLL, does not apply to the unit(s). Such changes do not qualify as modifications under 40 CFR part 60, subpart LLLL.

§ 62.15860 What SSI units are exempt from the federal plan?

This subpart exempts combustion units that incinerate sewage sludge and are not located at a wastewater treatment facility designed to treat domestic sewage sludge. These units may be subject to another subpart of this part (e.g., subpart III of this part). If you own or operate such a combustion unit, you must notify the

Administrator of an exemption claim under this section.

§ 62.15865 How do I determine if my SSI unit is covered by an approved and effective state or tribal plan?

This part contains a list of all states and tribal areas with approved Clean Air Act (CAA) section 111(d)/129 plans in effect.

However, this part is only updated once a year. Thus, if this part does not indicate that your state or tribal area has an approved and effective plan, you should contact your state environmental agency's air director or your EPA regional office to determine if approval occurred since publication of the most recent version of this part. A state may also meet its CAA section 111(d)/129 obligations by submitting an acceptable written request for delegation of the federal plan that meets the requirements of this section. This is the only other option for a state to meet its 111(d)/129 obligations.

- (a) An acceptable federal plan delegation request must include the following:
- (1) A demonstration of adequate resources and legal authority to administer and enforce the federal plan.
- (2) The items under \$60.5015(a)(1), (2), and (7) of this chapter.
- (3) Certification that the hearing on the state delegation request, similar to the hearing for a state plan submittal, was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission.

- (4) A commitment to enter into a Memorandum of Agreement with the Regional Administrator who sets forth the terms, conditions and effective date of the delegation and that serves as the mechanism for the transfer of authority. Additional guidance and information is given in the EPA's "Delegations Manual, Item 7-139, Implementation and Enforcement of 111(d)(2) and 111(d)(2)/129(b)(3) federal plans."

 (b) A state with an already approved SSI CAA section 111(d)/129 state plan is not precluded from receiving EPA approval of a delegation request for the federal plan, providing the requirements of paragraph (a) of this section are met, and at the time of the delegation request, the state also requests withdrawal of the EPA's previous state plan approval.
- (c) A state's CAA section 111(d)/129 obligations are separate from its obligations under title V of the CAA.

§ 62.15870 If my SSI unit is not listed on the federal plan inventory, am I exempt from this subpart?

Not necessarily. Sources subject to this subpart include, but are not limited to, the inventory of sources listed in Docket ID Number EPA-HQ-OAR-2012-0319 for the federal plan. Review the applicability of §62.15855 to determine if you are subject to this subpart.

Compliance Schedules

§ 62.15875 What is my final compliance date?

Except as provided in paragraph (b) of this section, you must

submit a final control plan and achieve final compliance specified by the date in paragraph (a) of this section:

- (a) March 21, 2016, as specified in Table 1 of this subpart.
- (b) March 21, 2017, for East Bank Wastewater Treatment Plant, 6501

 Florida Avenue, New Orleans, Louisiana 70117, and for the Bayshore

 Regional Wastewater Treatment Plant, 100 Oak Street, Union Beach, New

 Jersey 07735.

§ 62.15880 [Reserved]

final compliance has been achieved;

§ 62.15885 What must I include in the notifications of achievement of compliance?

Your notification of achievement of compliance must include the three items specified in paragraphs (a) through (c) of this section:

(a) Notification that the final control plan has been submitted and

- (b) Any items required to be submitted with the final control plan and final compliance; and
- (c) Signature of the owner or operator of the SSI unit.

§ 62.15890 When must I submit the notifications of achievement of compliance?

Notifications for achieving compliance must be postmarked no later than 10 business days after the compliance date.

§ 62.15895 What if I do not meet the compliance date?

If you fail to submit a final control plan and achieve final compliance, you must submit a notification to the Administrator

postmarked within 10 business days after the compliance date in Table 1 to this subpart. You must inform the Administrator that you did not achieve compliance, and you must continue to submit reports each subsequent calendar month until a final control plan is submitted and final compliance is met. An SSI unit that operates out of compliance after the final compliance date would be in violation of the federal plan and subject to enforcement action.

§ 62.15900 How do I comply with the requirement for submittal of a control plan?

For your control plan, you must satisfy the two requirements specified in paragraphs (a) and (b) of this section.

- (a) Submit the final control plan to your EPA regional office and permitting authority or delegated authority that includes the four items described in paragraphs (a)(1) through (4) of this section:
- (1) A description of the devices for air pollution control and process changes that you will use to comply with the emission limits and standards and other requirements of this subpart;
- (2) The type(s) of waste to be burned, if waste other than sewage sludge is burned in the unit;
- (3) The maximum design sewage sludge burning capacity; and
- (4) If applicable, the petition for site-specific operating limits under § 62.15965.
- (b) Maintain an onsite copy of the final control plan.

§ 62.15905 How do I achieve final compliance?

For achieving final compliance, you must complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected SSI unit is brought online, all necessary process changes and air pollution control devices would operate as designed.

§ 62.15910 What must I do if I close my SSI unit and then restart it?

- (a) If you close your SSI unit but will restart it prior to the final compliance, you must submit a final control plan and achieve final compliance as specified in § 62.15875.
- (b) If you close your SSI unit but will restart it after the final compliance date, you must complete emission control retrofits and meet the emission limits, emission standards, and operating limits on the date your unit restarts operation.

§ 62.15915 What must I do if I plan to permanently close my SSI unit and not restart it?

If you plan to close your SSI unit rather than comply with the federal plan, submit a closure notification, including the date of closure, to the Administrator by the date your final control plan is due.

Operator Training and Qualification

§ 62.15920 What are the operator training and qualification requirements?

(a) An SSI unit cannot be operated unless a fully trained and qualified SSI unit operator is accessible, either at the facility or

can be at the facility within 1 hour. The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily not accessible, you must follow the procedures in § 62.15945.

- (b) Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in paragraph (c) of this section.
- (c) Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of this section:
- (1) Training on the 10 subjects listed in paragraphs (c)(1)(i) through (x) of this section:
- (i) Environmental concerns, including types of emissions;
- (ii) Basic combustion principles, including products of combustion;(iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, sewage sludge feeding and
- (iv) Combustion controls and monitoring;

shutdown procedures;

- (v) Operation of air pollution control equipment and factors
 affecting performance (if applicable);
- (vi) Inspection and maintenance of the incinerator and air pollution
 control devices;
- (vii) Actions to prevent malfunctions or to prevent conditions that

may lead to malfunctions;

- (viii) Bottom and fly ash characteristics and handling procedures;
 (ix) Applicable federal, state and local regulations, including
 Occupational Safety and Health Administration workplace standards;
 and
- (x) Pollution prevention.
- (2) An examination designed and administered by the state-approved program or instructor administering the subjects in paragraph (c)(1) of this section.
- (3) Written material covering the training course topics that may serve as reference material following completion of the course.

§ 62.15925 When must the operator training course be completed?

The operator training course must be completed by the later of the three dates specified in paragraphs (a) through (c) of this section:

- (a) The final compliance date;
- (b) Six months after your SSI unit startup; and
- (c) Six months after an employee assumes responsibility for operating the SSI unit or assumes responsibility for supervising the operation of the SSI unit.

§ 62.15930 How do I obtain my operator qualification?

- (a) You must obtain operator qualification by completing a training course that satisfies the criteria under § 62.15920(b).
- (b) Qualification is valid from the date on which the training course

is completed and the operator successfully passes the examination required under 62.15920(c)(2).

§ 62.15935 How do I maintain my operator qualification?

To maintain qualification, you must complete an annual review or refresher course covering, at a minimum, the five topics described in paragraphs (a) through (e) of this section:

- (a) Update of regulations;
- (b) Incinerator operation, including startup and shutdown procedures, sewage sludge feeding and ash handling;
- (c) Inspection and maintenance;
- (d) Prevention of malfunctions or conditions that may lead to malfunction; and
- (e) Discussion of operating problems encountered by attendees.

§ 62.15940 How do I renew my lapsed operator qualification?

You must renew a lapsed operator qualification before you begin operation of an SSI unit by one of the two methods specified in paragraphs (a) and (b) of this section:

- (a) For a lapse of less than 3 years, you must complete a standard annual refresher course described in § 62.15935; and
- (b) For a lapse of 3 years or more, you must repeat the initial qualification requirements in § 62.15920.

§ 62.15945 What if all the qualified operators are temporarily not accessible?

If a qualified operator is not at the facility and cannot be at

the facility within 1 hour, you must meet the criteria specified in either paragraph (a) or (b) of this section, depending on the length of time that a qualified operator is not accessible:

- (a) When a qualified operator is not accessible for more than 8 hours, the SSI unit may be operated for less than 2 weeks by other plant personnel who are familiar with the operation of the SSI unit and who have completed a review of the information specified in § 62.15950 within the past 12 months. However, you must record the period when a qualified operator was not accessible and include this deviation in the annual report as specified under § 62.16030(c).
- (b) When a qualified operator is not accessible for 2 weeks or more, you must take the two actions that are described in paragraphs (b)(1) and (2) of this section:
- (1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible; and
- (2) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the SSI unit. You must submit the first status report 4 weeks after you notify the Administrator of the deviation under paragraph (b)(1) of this section:

- (i) If the Administrator notifies you that your request to continue operation of the SSI unit is disapproved, the SSI unit may continue operation for 30 days and then must cease operation; and (ii) Operation of the unit may resume if a qualified operator is accessible as required under § 62.15920(a). You must notify the Administrator within 5 days of having resumed operations and of having a qualified operator accessible.
- § 62.15950 What site-specific documentation is required and how often must it be reviewed by qualified operators and plant personnel?
- (a) You must maintain at the facility the documentation of the operator training procedures specified under § 62.15920(c)(1) and make the documentation readily accessible to all SSI unit operators.
- (b) You must establish a program for reviewing the information listed in \S 62.15920(c)(1) with each qualified incinerator operator and other plant personnel who may operate the unit according to the provisions of \S 62.15945(a), according to the following schedule:
- (1) The initial review of the information listed in § 62.15920(c)(1) must be conducted within [INSERT DATE 6 MONTHS AND 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] or prior to an employee's assumption of responsibilities for operation of the SSI unit, whichever date is later; and
- (2) Subsequent annual reviews of the information listed in § 62.15920(c)(1) must be conducted no later than 12 months following the previous review.

Emission Limits, Emission Standards and Operating Limits and Requirements

§ 62.15955 What emission limits and standards must I meet and by when?

You must meet the emission limits and standards specified in Table 2 or 3 to this subpart by the final compliance date specified in §62.15875. The emission limits and standards apply at all times the unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time).

§ 62.15960 What operating limits and requirements must I meet and by when?

You must meet, as applicable, the operating limits and requirements specified in paragraphs (a) through (d) and (h) of this section, according to the schedule specified in paragraph (e) of this section. The operating parameters for which you will establish operating limits for a wet scrubber, fabric filter, electrostatic precipitator or activated carbon injection are listed in Table 4 to this subpart. You must comply with the operating requirements in paragraph (f) of this section and the requirements in paragraph (g) of this section for meeting any new operating limits, re-established in § 62.16005. The operating limits apply at all times that sewage

sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time):

- (a) You must meet a site-specific operating limit for minimum operating temperature of the combustion chamber (or afterburner combustion chamber) that you establish in § 62.15985;
- (b) If you use a wet scrubber, electrostatic precipitator, activated carbon injection or afterburner to comply with an emission limit, you must meet the site-specific operating limits that you establish in \$ 62.15985 for each operating parameter associated with each air pollution control device;
- (c) If you use a fabric filter to comply with the emission limits, you must install the bag leak detection system specified in §§ 62.15995(b) and 62.16020(b)(3)(i) and operate the bag leak detection system such that the alarm does not sound more than 5-percent of the operating time during a 6-month period. You must calculate the alarm time as specified in § 62.16005(a)(2)(i);
- (d) You must meet the operating requirements in your site-specific fugitive emission monitoring plan, submitted as specified in \$ 62.15995(d) to ensure that your ash handling system will meet the emission standard for fugitive emissions from ash handling;
- (e) You must meet the operating limits and requirements specified in paragraphs (a) through (d) of this section by the final compliance date specified in §62.15875;

- (f) You must monitor the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, as specified in paragraphs (f)(1) and (2) of this section:
- (1) Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. Keep a record of the daily average feed rate, as specified in § 62.16025(f)(3)(ii); and
- (2) Take at least one grab sample per day of the sewage sludge fed to the sewage sludge incinerator. If you take more than one grab sample in a day, calculate the daily average for the grab samples. Keep a record of the daily average moisture content, as specified in § 62.16025(f)(3)(ii).
- (g) For the operating limits and requirements specified in paragraphs
 (a) through (d) and (h) of this section, you must meet any new
 operating limits and requirements, re-established according to
 § 62.16005(d)); and
- (h) If you use an air pollution control device other than a wet scrubber, fabric filter, electrostatic precipitator or activated carbon injection to comply with the emission limits in Table 2 or 3 to this subpart, you must meet any site-specific operating limits or requirements that you establish as required in § 62.15965.
- § 62.15965 How do I establish operating limits if I do not use a wet scrubber, fabric filter, electrostatic precipitator, activated carbon injection, or afterburner, or if I limit emissions in some other

manner, to comply with the emission limits?

If you use an air pollution control device other than a wet scrubber, fabric filter, electrostatic precipitator, activated carbon injection, or afterburner, or limit emissions in some other manner (e.g., materials balance) to comply with the emission limits in § 62.15955, you must meet the requirements in paragraphs (a) and (b) of this section:

- (a) Meet the applicable operating limits and requirements in \$ 60.4850 of this chapter, and establish applicable operating limits according to \$ 62.15985; and
- (b) Petition the Administrator for specific operating parameters, operating limits, and averaging periods to be established during the initial performance test and to be monitored continuously thereafter.
- (1) You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. You must not conduct the initial performance test until after the petition has been approved by the Administrator, and you must comply with the operating limits as written, pending approval by the Administrator. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart;
- (2) Your petition must include the five items listed in paragraphs(b) (2) (i) through (v) of this section:

- (i) Identification of the specific parameters you propose to monitor;

 (ii) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants;
- (iii) A discussion of how you will establish the upper and/or lower values for these parameters that will establish the operating limits on these parameters, including a discussion of the averaging periods associated with those parameters for determining compliance;

 (iv) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as
- the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
- (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

§ 62.15970 Do the emission limits, emission standards, and operating limits apply during periods of startup, shutdown, and malfunction?

The emission limits and standards apply at all times and during periods of malfunction. The operating limits apply at all times that sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). For

determining compliance with the CO concentration limit using CO CEMS, the correction to 7-percent oxygen does not apply during periods of startup or shutdown. Use the measured CO concentration without correcting for oxygen concentration in averaging with other CO concentrations (corrected to 7-percent O_2) to determine the 24-hour average value.

§ 62.15975 [Reserved]

Initial Compliance Requirements

§ 62.15980 How and when do I demonstrate initial compliance with the emission limits and standards?

To demonstrate initial compliance with the emission limits and standards in Table 2 or 3 to this subpart, use the procedures specified in paragraph (a) of this section. In lieu of using the procedures specified in paragraph (a) of this section, you have the option to demonstrate initial compliance using the procedures specified in paragraph (b) of this section for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead and fugitive emissions from ash handling. You must meet the requirements of paragraphs (a) and (b) of this section, as applicable, and paragraphs (c) through (e) of this section, according to the performance testing, monitoring, and calibration requirements in § 62.16015(a) and (b).

(a) Demonstrate initial compliance using the performance test

required in § 60.8 of this chapter. You must demonstrate that your SSI unit meets the emission limits and standards specified in Table 2 or 3 to this subpart for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead and fugitive emissions from ash handling using the performance test. The initial performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 or 3 to this subpart and according to the testing, monitoring, and calibration requirements specified in § 62.16015(a).

- (1) Except as provided in paragraph (e) of this section, you must demonstrate that your SSI unit meets the emission limits and standards specified in Table 2 or 3 to this subpart by the final compliance date (see Table 1 to this subpart).
- (2) You may use the results from a performance test conducted within the 2 previous years that was conducted under the same conditions and demonstrated compliance with the emission limits and standards in Table 2 or 3 to this subpart, provided no process changes have been made since you conducted that performance test. However, you must continue to meet the operating limits established during the most recent performance test that demonstrated compliance with the emission limits and standards in Table 2 or 3 to this subpart. The performance test must have used the test methods specified in Table 2

or 3 to this subpart.

- (b) Demonstrate initial compliance using a continuous emissions monitoring system or continuous automated sampling system. The option to use a continuous emissions monitoring system for hydrogen chloride, dioxins/furans, cadmium, or lead takes effect on the date a final performance specification applicable to hydrogen chloride, dioxins/furans, cadmium or lead is published in the Federal Register. The option to use a continuous automated sampling system for dioxins/furans takes effect on the date a final performance specification for such a continuous automated sampling system is published in the Federal Register. Collect data as specified in § 62.16015(b)(6) and use the following procedures:
- (1) To demonstrate initial compliance with the emission limits specified in Table 2 or 3 to this subpart for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium and lead, you may substitute the use of a continuous monitoring system in lieu of conducting the initial performance test required in paragraph (a) of this section, as follows:
- (i) You may substitute the use of a continuous emissions monitoring system for any pollutant specified in paragraph (b)(1) of this section in lieu of conducting the initial performance test for that pollutant in paragraph (a) of this section. For determining compliance with the carbon monoxide concentration limit using carbon

monoxide CEMS, the correction to 7-percent oxygen does not apply during periods of startup or shutdown. Use the measured carbon monoxide concentration without correcting for oxygen concentration in averaging with other carbon monoxide concentrations (corrected to 7-percent oxygen) to determine the 24-hour average value.

- (ii) You may substitute the use of a continuous automated sampling system for mercury or dioxins/furans in lieu of conducting the annual mercury or dioxin/furan performance test in paragraph (a) of this section.
- (2) If you use a continuous emissions monitoring system to demonstrate compliance with an applicable emission limit in Table 2 or 3 to this subpart, as described in paragraph (b)(1) of this section, you must use the continuous emissions monitoring system and follow the requirements specified in § 62.16015(b). You must measure emissions according to § 60.13 of this chapter to calculate 1-hour arithmetic averages, corrected to 7-percent oxygen (or carbon dioxide). You must demonstrate initial compliance using a 24-hour block average of these 1-hour arithmetic average emission concentrations, calculated using Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7.
- (3) If you use a continuous automated sampling system to demonstrate compliance with an applicable emission limit in Table 2 or 3 to this subpart, as described in paragraph (b)(1) of this section, you must:

 (i) Use the continuous automated sampling system specified in

- § 60.58b(p) and (q) of this chapter, and measure and calculate average emissions corrected to 7-percent oxygen (or carbon dioxide) according to § 60.58b(p) and your monitoring plan.
- (A) Use the procedures specified in § 60.58b(p) of this chapter to calculate 24-hour block averages to determine compliance with the mercury emission limit in Table 2 or 3 to this subpart.
- (B) Use the procedures specified in § 60.58b(p) of this chapter to calculate 2-week block averages to determine compliance with the dioxin/furan (total mass basis or toxic equivalency basis) emission limit in Table 2 or 3 to this subpart.
- (ii) Comply with the provisions in § 60.58b(q) of this chapter to develop a monitoring plan. For mercury continuous automated sampling systems, you must use Performance Specification 12B of appendix B of part 75 of this chapter and Procedure 5 of appendix F of part 60 of this chapter.
- (4) Except as provided in paragraph (e) of this section, you must complete your initial performance evaluations required under your monitoring plan for any continuous emissions monitoring systems and continuous automated sampling systems by the final compliance date (see Table 1 to this subpart). Your performance evaluation must be conducted using the procedures and acceptance criteria specified in § 62.15995(a)(3).
- (c) To demonstrate initial compliance with the dioxins/furans toxic equivalency emission limit in Table 2 or 3 to this subpart, determine

dioxins/furans toxic equivalency as follows:

- (1) Measure the concentration of each dioxin/furan tetra- through octachlorinated-isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A-7.
- (2) Multiply the concentration of each dioxin/furan (tetra- through octa-chlorinated) isomer by its corresponding toxic equivalency factor specified in Table 5 to this subpart.
- (3) Sum the products calculated in accordance with paragraph (c)(2) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.
- (d) Submit an initial compliance report, as specified in § 62.16030(b).
- (e) If you demonstrate initial compliance using the performance test specified in paragraph (a) of this section, then the provisions of this paragraph (e) apply. If a force majeure is about to occur, occurs or has occurred for which you intend to assert a claim of force majeure, you must notify the Administrator in writing as specified in § 62.16030(f). You must conduct the initial performance test as soon as practicable after the force majeure occurs. The Administrator will determine whether or not to grant the extension to the initial performance test deadline and will notify you in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, you remain strictly subject to

the requirements of this subpart.

§ 62.15985 How do I establish my operating limits?

- (a) You must establish the site-specific operating limits specified in paragraphs (b) through (h) of this section or established in § 62.15965, as applicable, during your initial performance tests required in § 62.15980. You must meet the requirements in § 62.16005(d) to confirm these operating limits or re-establish new operating limits using operating data recorded during any performance tests or performance evaluations required in § 62.16000. You must follow the data measurement and recording frequencies and data averaging times specified in Table 4 to this subpart or as established in § 62.15965, and you must follow the testing, monitoring and calibration requirements specified in §§ 62.16015 and 62.16020 or established in § 62.15965. You are not required to establish operating limits for the operating parameters listed in Table 4 to this subpart for a control device if you use a continuous monitoring system to demonstrate compliance with the emission limits in Table 2 or 3 to this subpart for the applicable pollutants, as follows:
- (1) For a scrubber designed to control emissions of hydrogen chloride or sulfur dioxide, you are not required to establish an operating limit and monitor scrubber liquid flow rate or scrubber liquid pH if you use the continuous monitoring system specified in §§ 60.4865(b) and 60.4885(b) of this chapter to demonstrate compliance with the

emission limit for hydrogen chloride or sulfur dioxide.

- (2) For a scrubber designed to control emissions of particulate matter, cadmium and lead, you are not required to establish an operating limit and monitor pressure drop across the scrubber or scrubber liquid flow rate if you use the continuous monitoring system specified in §§ 60.4865(b) and 60.4885(b) of this chapter to demonstrate compliance with the emission limit for particulate matter, cadmium and lead.
- (3) For an electrostatic precipitator designed to control emissions of particulate matter, cadmium and lead, you are not required to establish an operating limit and monitor secondary voltage of the collection plates, secondary amperage of the collection plates or effluent water flow rate at the outlet of the electrostatic precipitator if you use the continuous monitoring system specified in \$\\$ 60.4865(b) and 60.4885(b) of this chapter to demonstrate compliance with the emission limit for particulate matter, lead and cadmium.
- (4) For an activated carbon injection system designed to control emissions of mercury, you are not required to establish an operating limit and monitor sorbent injection rate and carrier gas flow rate (or carrier gas pressure drop) if you use the continuous monitoring system specified in §§ 60.4865(b) and 60.4885(b) of this chapter to demonstrate compliance with the emission limit for mercury.
- (5) For an activated carbon injection system designed to control

emissions of dioxins/furans, you are not required to establish an operating limit and monitor sorbent injection rate and carrier gas flow rate (or carrier gas pressure drop) if you use the continuous monitoring system specified in §§ 60.4865(b) and 60.4885(b) of this chapter to demonstrate compliance with the emission limit for dioxins/furans (total mass basis or toxic equivalency basis).

- (b) Minimum pressure drop across each wet scrubber used to meet the particulate matter, lead and cadmium emission limits in Table 2 or 3 to this subpart, equal to the lowest 4-hour average pressure drop across each such wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter, lead and cadmium emission limits.
- (c) Minimum scrubber liquid flow rate (measured at the inlet to each wet scrubber), equal to the lowest 4-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.
- (d) Minimum scrubber liquid pH for each wet scrubber used to meet the sulfur dioxide or hydrogen chloride emission limits in Table 2 or 3 to this subpart, equal to the lowest 1-hour average scrubber liquid pH measured during the most recent performance test demonstrating compliance with the sulfur dioxide and hydrogen chloride emission limits.
- (e) Minimum combustion chamber operating temperature (or minimum afterburner temperature), equal to the lowest 4-hour average

combustion chamber operating temperature (or afterburner temperature) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

- (f) Minimum power input to the electrostatic precipitator collection plates, equal to the lowest 4-hour average secondary electric power measured during the most recent performance test demonstrating compliance with the particulate matter, lead and cadmium emission limits. Power input must be calculated as the product of the secondary voltage and secondary amperage to the electrostatic precipitator collection plates. Both the secondary voltage and secondary amperage must be recorded during the performance test.
- (g) Minimum effluent water flow rate at the outlet of the electrostatic precipitator, equal to the lowest 4-hour average effluent water flow rate at the outlet of the electrostatic precipitator measured during the most recent performance test demonstrating compliance with the particulate matter, lead and cadmium emission limits.
- (h) For activated carbon injection, establish the site-specific operating limits specified in paragraphs (h)(1) through (3) of this section.
- (1) Minimum mercury sorbent injection rate, equal to the lowest 4-hour average mercury sorbent injection rate measured during the most recent performance test demonstrating compliance with the mercury emission limit.

- (2) Minimum dioxin/furan sorbent injection rate, equal to the lowest 4-hour average dioxin/furan sorbent injection rate measured during the most recent performance test demonstrating compliance with the dioxin/furan (total mass basis or toxic equivalency basis) emission limit.
- (3) Minimum carrier gas flow rate or minimum carrier gas pressure drop, as follows:
- (i) Minimum carrier gas flow rate, equal to the lowest 4-hour average carrier gas flow rate measured during the most recent performance test demonstrating compliance with the applicable emission limit.
- (ii) Minimum carrier gas pressure drop, equal to the lowest 4-hour average carrier gas flow rate measured during the most recent performance test demonstrating compliance with the applicable emission limit.

§ 62.15990 By what date must I conduct the initial air pollution control device inspection and make any necessary repairs?

- (a) You must conduct an air pollution control device inspection according to § 62.16015(c) by the final compliance date as specified in §62.15875. For air pollution control devices installed after the final compliance date, you must conduct the air pollution control device inspection within 60 days after installation of the control device.
- (b) Within 10 operating days following the air pollution control device inspection under paragraph (a) of this section, all necessary

repairs must be completed unless you obtain written approval from the Administrator establishing a date whereby all necessary repairs of the SSI unit must be completed.

§ 62.15995 How do I develop a site-specific monitoring plan for my continuous monitoring, bag leak detection, and ash handling systems, and by what date must I conduct an initial performance evaluation?

You must develop and submit to the Administrator for approval a site-specific monitoring plan for each continuous monitoring system required under this subpart, according to the requirements in paragraphs (a) through (c) of this section. This requirement also applies to you if you petition the Administrator for alternative monitoring parameters under § 60.13(i) of this chapter and paragraph (e) of this section. If you use a continuous automated sampling system to comply with the mercury or dioxin/furan (total mass basis or toxic equivalency basis) emission limits, you must develop your monitoring plan as specified in § 60.58b(q) of this chapter, and you are not required to meet the requirements in paragraphs (a) and (b) of this section. You must also submit a site-specific monitoring plan for your ash handling system, as specified in paragraph (d) of this section. You must submit and update your monitoring plans as specified in paragraphs (f) through (h) of this section.

(a) For each continuous monitoring system, your monitoring plan must address the elements and requirements specified in paragraphs (a)(1) through (8) of this section. You must operate and maintain the

continuous monitoring system in continuous operation according to the site-specific monitoring plan.

- (1) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).
- (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems.
- (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
- (i) For continuous emissions monitoring systems, your performance evaluation and acceptance criteria must include, but is not limited to, the following:
- (A) The applicable requirements for continuous emissions monitoring systems specified in § 60.13 of this chapter.
- (B) The applicable performance specifications (e.g., relative accuracy tests) in appendix B of part 60 of this chapter.
- (C) The applicable procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) in appendix F of part 60 of this chapter.
- (D) A discussion of how the occurrence and duration of out-of-control periods will affect the suitability of CEMS data, where out-of-

control has the meaning given in paragraph (a)(7)(i) of this section.

- (ii) For continuous parameter monitoring systems, your performance evaluation and acceptance criteria must include, but is not limited to, the following:
- (A) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs

 (a) (3) (ii) (A) (1) through (4) of this section.
- $(\underline{1})$ Install the flow sensor and other necessary equipment in a position that provides a representative flow.
- $(\underline{2})$ Use a flow sensor with a measurement sensitivity of no greater than 2-percent of the expected process flow rate.
- $(\underline{3})$ Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
- $(\underline{4})$ Conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (B) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (a)(3)(ii)(B)(1) through (6) of this section.
- $(\underline{1})$ Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (e.g., particulate matter scrubber pressure drop).
- (2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

- (3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1-percent of the pressure monitoring system operating range, whichever is less.
- $(\underline{4})$ Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (e.g., check for pressure tap pluggage daily).
- $(\underline{5})$ Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in your monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.
- (C) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (a) (3) (ii) (C) ($\underline{1}$) through (4) of this section.
- $(\underline{1})$ Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.
- $(\underline{2})$ Ensure the sample is properly mixed and representative of the fluid to be measured.
- (3) Conduct a performance evaluation of the pH monitoring system in

accordance with your monitoring plan at least once each process operating day.

- $(\underline{4})$ Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the operating limit pH level) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.
- (D) If you have an operating limit that requires the use of a temperature measurement device, you must meet the requirements in paragraphs (a)(3)(ii)(D)(1) through (4) of this section.
- $(\underline{1})$ Install the temperature sensor and other necessary equipment in a position that provides a representative temperature.
- $(\underline{2})$ Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0-percent of the temperature value, whichever is larger, for a noncryogenic temperature range.
- (3) Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5-percent of the temperature value, whichever is larger, for a cryogenic temperature range.
- $(\underline{4})$ Conduct a temperature measurement device performance evaluation at the time of each performance test but no less frequently than annually.
- (E) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator, you must meet the requirements in paragraphs (a)(3)(ii)(E)(1) and (2) of this

section.

- $(\underline{1})$ Install sensors to measure (secondary) voltage and current to the electrostatic precipitator collection plates.
- (2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (F) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (e.g., weigh belt, weigh hopper or hopper flow measurement device), you must meet the requirements in paragraphs (a)(3)(ii)(F)($\underline{1}$) and ($\underline{2}$) of this section.
- $(\underline{1})$ Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.
- $(\underline{2})$ Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (4) Ongoing operation and maintenance procedures in accordance with the general requirements of § 60.11(d) of this chapter.
- (5) Ongoing data quality assurance procedures in accordance with the general requirements of § 60.13 of this chapter.
- (6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 60.7(b), (c) introductory text, (c)(1), (c)(4), (d), (e), (f), and (g) of this chapter.
- (7) Provisions for periods when the continuous monitoring system is

out of control, as follows:

- (i) A continuous monitoring system is out of control if the conditions of paragraph (a)(7)(i)(A) or (B) of this section are met.
- (A) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard.
- (B) The continuous monitoring system fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit or linearity test audit.
- (ii) When the continuous monitoring system is out of control as specified in paragraph (a)(7)(i) of this section, you must take the necessary corrective action and must repeat all necessary tests that indicate that the system is out of control. You must take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour you conduct a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits.
- (8) Schedule for conducting initial and periodic performance evaluations of your continuous monitoring systems.
- (b) If a bag leak detection system is used, your monitoring plan must

include a description of the following items:

- (1) Installation of the bag leak detection system in accordance with paragraphs (b)(1)(i) and (ii) of this section.
- (i) Install the bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent or compartment (e.g., for a positive pressure fabric filter) of the fabric filter.
- (ii) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.
- (2) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established. Use a bag leak detection system equipped with a system that will sound an alarm when the system detects an increase in relative particulate matter emissions over a preset level. The alarm must be located where it is observed readily and any alert is detected and recognized easily by plant operating personnel.
- (3) Evaluations of the performance of the bag leak detection system, performed in accordance with your monitoring plan and consistent with the guidance provided in OAQPS Fabric Filter Bag Leak Detection Guidance, EPA-454/R-98-015, September 1997. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy from the U.S. Environmental Protection Agency, 1200 Pennsylvania

Avenue, NW, Washington, D.C. 20460, (202) 272-0167, http://www.epa.gov. You may inspect a copy at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr locations.html.

- (4) Operation of the bag leak detection system, including quality assurance procedures.
- (5) Maintenance of the bag leak detection system, including a routine maintenance schedule and spare parts inventory list.
- (6) Recordkeeping (including record retention) of the bag leak detection system data. Use a bag leak detection system equipped with a device to continuously record the output signal from the sensor.
- (c) You must conduct an initial performance evaluation of each continuous monitoring system and bag leak detection system, as applicable, in accordance with your monitoring plan and to § 60.13(c) of this chapter. For the purpose of this subpart, the provisions of § 60.13(c) also apply to the bag leak detection system. You must conduct the initial performance evaluation of each continuous monitoring system within 60 days of installation of the monitoring system
- (d) You must submit a monitoring plan specifying the ash handling system operating procedures that you will follow to ensure that you meet the fugitive emissions limit specified in Table 2 or 3 to this

subpart.

- (e) You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the standards of this subpart, subject to the provisions of paragraphs (e) (1) through (6) of this section.
- (1) The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved over the duration of three performance test runs.
- (2) If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.
- (3) You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (e)(3)(i) through (iii) of this section:
- (i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach.
- (ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the

limit, and how the limit is to be calculated.

- (iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.
- (4) The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide the following:

 (i) Notice of the information and findings upon which the intended disapproval is based.
- (ii) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.
- (5) You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart.

- (6) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.
- (f) You must submit your monitoring plans required in paragraphs (a) and (b) of this section at least 60 days before your initial performance evaluation of your continuous monitoring system(s).
- (g) You must submit your monitoring plan for your ash handling system, as required in paragraph (d) of this section, at least 60 days before your initial compliance test date.
- (h) You must update and resubmit your monitoring plan if there are any changes or potential changes in your monitoring procedures or if there is a process change, as defined in § 62.16045.

Continuous Compliance Requirements

§ 62.16000 How and when do I demonstrate continuous compliance with the emission limits and standards?

To demonstrate continuous compliance with the emission limits and standards specified in Table 2 or 3 to this subpart, use the procedures specified in paragraph (a) of this section. In lieu of using the procedures specified in paragraph (a) of this section, you have the option to demonstrate initial compliance using the procedures specified in paragraph (b) of this section for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total

mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead and fugitive emissions from ash handling. You must meet the requirements of paragraphs (a) and (b) of this section, as applicable, and paragraphs (c) through (e) of this section, according to the performance testing, monitoring, and calibration requirements in § 62.16015(a) and (b). You may also petition the Administrator for alternative monitoring parameters as specified in paragraph (f) of this section.

- (a) Demonstrate continuous compliance using a performance test.

 Except as provided in paragraphs (a) (3) and (e) of this section,
 following the date that the initial performance test for each
 pollutant in Table 2 or 3 to this subpart is completed, you must
 conduct a performance test for each such pollutant on an annual basis
 (between 11 and 13 calendar months following the previous performance
 test). The performance test must be conducted using the test methods,
 averaging methods, and minimum sampling volumes or durations
 specified in Table 2 or 3 to this subpart and according to the
 testing, monitoring and calibration requirements specified in
 \$ 62.16015(a).
- (1) You may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time.
- (2) You must repeat the performance test within 60 days of a process

change, as defined in § 62.16045.

(3) Except as specified in paragraphs (a)(1) and (2) of this section, you can conduct performance tests less often for a given pollutant, as specified in paragraphs (a)(3)(i) through (iii) of this section. (i) You can conduct performance tests less often if your performance tests for the pollutant for at least 2 consecutive years show that your emissions are at or below 75-percent of the emission limit specified in Table 2 or 3 to this subpart, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 37 months after the previous performance test. (ii) If your SSI unit continues to meet the emission limit for the pollutant, you may choose to conduct performance tests for the pollutant every third year if your emissions are at or below 75percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test. (iii) If a performance test shows emissions exceeded 75-percent of the emission limit for a pollutant, you must conduct annual

performance tests for that pollutant until all performance tests over

2 consecutive years show compliance.

- (b) Demonstrate continuous compliance using a continuous emissions monitoring system or continuous automated sampling system. The option to use a continuous emissions monitoring system for hydrogen chloride, dioxins/furans, cadmium or lead takes effect on the date a final performance specification applicable to hydrogen chloride, dioxins/furans, cadmium or lead is published in the Federal Register. The option to use a continuous automated sampling system for dioxins/furans takes effect on the date a final performance specification for such a continuous automated sampling system is published in the Federal Register. Collect data as specified in \$ 62.16015(b) (6) and use the following procedures:
- (1) To demonstrate continuous compliance with the emission limits for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium and lead, you may substitute the use of a continuous monitoring system in lieu of conducting the annual performance test required in paragraph (a) of this section, as follows:
- (i) You may substitute the use of a continuous emissions monitoring system for any pollutant specified in paragraph (b)(1) of this section in lieu of conducting the annual performance test for that pollutant in paragraph (a) of this section. For determining compliance with the carbon monoxide concentration limit using carbon monoxide CEMS, the correction to 7-percent oxygen does not apply

during periods of startup or shutdown. Use the measured carbon monoxide concentration without correcting for oxygen concentration in averaging with other carbon monoxide concentrations (corrected to 7-percent oxygen) to determine the 24-hour average value.

- (ii) You may substitute the use of a continuous automated sampling system for mercury or dioxins/furans in lieu of conducting the annual mercury or dioxin/furan performance test in paragraph (a) of this section.
- (2) If you use a continuous emissions monitoring system to demonstrate compliance with an applicable emission limit in paragraph (b) (1) of this section, you must use the continuous emissions monitoring system and follow the requirements specified in § 62.16015(b). You must measure emissions according to § 60.13 of this chapter to calculate 1-hour arithmetic averages, corrected to 7-percent oxygen (or carbon dioxide). You must demonstrate initial compliance using a 24-hour block average of these 1-hour arithmetic average emission concentrations, calculated using Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7.
- (3) If you use a continuous automated sampling system to demonstrate compliance with an applicable emission limit in paragraph (b)(1) of this section, you must:
- (i) Use the continuous automated sampling system specified in § 60.58b(p) and (q) of this chapter, and measure and calculate average emissions corrected to 7-percent oxygen (or carbon dioxide)

according to § 60.58b(p) and your monitoring plan.

- (A) Use the procedures specified in § 60.58b(p) of this chapter to calculate 24-hour averages to determine compliance with the mercury emission limit in Table 2 or 3 to this subpart.
- (B) Use the procedures specified in § 60.58b(p) of this chapter to calculate 2-week averages to determine compliance with the dioxin/furan (total mass basis or toxic equivalency basis) emission limits in Table 2 or 3 to this subpart.
- (ii) Update your monitoring plan as specified in § 60.4880(e) of this chapter. For mercury continuous automated sampling systems, you must use Performance Specification 12B of appendix B of part 75 of this chapter and Procedure 5 of appendix F of part 60 of this chapter.
- (4) Except as provided in paragraph (e) of this section, you must complete your periodic performance evaluations required in your monitoring plan for any continuous emissions monitoring systems and continuous automated sampling systems, according to the schedule specified in your monitoring plan. If you were previously determining compliance by conducting an annual performance test (or according to the less frequent testing for a pollutant as provided in paragraph (a)(3) of this section), you must complete the initial performance evaluation required under your monitoring plan in § 62.15995 for the continuous monitoring system prior to using the continuous emissions monitoring system to demonstrate compliance or continuous automated sampling system. Your performance evaluation must be conducted using

the procedures and acceptance criteria specified in § 62.15995(a)(3).

- (c) To demonstrate compliance with the dioxins/furans toxic equivalency emission limit in paragraph (a) or (b) of this section, you must determine dioxins/furans toxic equivalency as follows:
- (1) Measure the concentration of each dioxin/furan tetra- through octachlorinated-isomer emitted using Method 23 at 40 CFR part 60, appendix A-7.
- (2) For each dioxin/furan (tetra- through octachlorinated) isomer measured in accordance with paragraph (c)(1) of this section, multiply the isomer concentration by its corresponding toxic equivalency factor specified in Table 5 to this subpart.
- (3) Sum the products calculated in accordance with paragraph (c) (2) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.
- (d) You must submit an annual compliance report as specified in \$ 62.16030(c). You must submit a deviation report as specified in \$ 62.16030(d) for each instance that you did not meet each emission limit in Tables 2 and 3 to this subpart.
- (e) If you demonstrate continuous compliance using a performance test, as specified in paragraph (a) of this section, then the provisions of this paragraph (e) apply. If a force majeure is about to occur, occurs, or has occurred for which you intend to assert a claim of force majeure, you must notify the Administrator in writing as specified in § 62.16030(f). You must conduct the performance test

as soon as practicable after the force majeure occurs. The

Administrator will determine whether or not to grant the extension to

the performance test deadline, and will notify you in writing of

approval or disapproval of the request for an extension as soon as

practicable. Until an extension of the performance test deadline has

been approved by the Administrator, you remain strictly subject to

the requirements of this subpart.

(f) After any initial requests in § 62.15995 for alternative monitoring requirements for initial compliance, you may subsequently petition the Administrator for alternative monitoring parameters as specified in §§ 60.13(i) of this chapter and 62.15995(e).

§ 62.16005 How do I demonstrate continuous compliance with my operating limits?

You must continuously monitor your operating parameters as specified in paragraph (a) of this section and meet the requirements of paragraphs (b) and (c) of this section, according to the monitoring and calibration requirements in § 62.16020. You must confirm and re-establish your operating limits as specified in paragraph (d) of this section.

(a) You must continuously monitor the operating parameters specified in paragraphs (a)(1) and (2) of this section using the continuous monitoring equipment and according to the procedures specified in \$ 62.16020 or established in \$ 62.15965. To determine compliance, you must use the data averaging period specified in Table 4 to this

subpart (except for alarm time of the baghouse leak detection system) unless a different averaging period is established under § 62.15965.

- (1) You must demonstrate that the SSI unit meets the operating limits established according to §§ 62.15965 and 62.15985 and paragraph (d) of this section for each applicable operating parameter.
- (2) You must demonstrate that the SSI unit meets the operating limit for bag leak detection systems as follows:
- (i) For a bag leak detection system, you must calculate the alarm time as follows:
- (A) If inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted.
- (B) If corrective action is required, each alarm time shall be counted as a minimum of 1 hour.
- (C) If you take longer than 1 hour to initiate corrective action, each alarm time (i.e., time that the alarm sounds) is counted as the actual amount of time taken by you to initiate corrective action.
- (ii) Your maximum alarm time is equal to 5-percent of the operating time during a 6-month period, as specified in § 62.15960(c).
- (b) Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits.

You must submit the deviation report specified in § 62.16030(d) for each instance that you did not meet one of your operating limits established under this subpart.

- (c) You must submit the annual compliance report specified in § 62.16030(c) to demonstrate continuous compliance.
- (d) You must confirm your operating limits according to paragraph

 (d) (1) of this section or re-establish operating limits according to paragraph (d) (2) of this section. Your operating limits must be established so as to assure ongoing compliance with the emission limits. These requirements also apply to your operating requirements in your fugitive emissions monitoring plan specified in
- (1) Your operating limits must be based on operating data recorded during any performance test required in § 62.16000(a) or any performance evaluation required in § 62.16000(b)(4).

§ 62.15960(d).

(2) You may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward.

§ 62.16010 By what date must I conduct annual air pollution control device inspections and make any necessary repairs?

(a) You must conduct an annual inspection of each air pollution control device used to comply with the emission limits, according to \$ 62.16015(c), no later than 12 months following the previous annual air pollution control device inspection.

(b) Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless you obtain written approval from the Administrator establishing a date whereby all necessary repairs of the affected SSI unit must be completed.

Performance Testing, Monitoring, and Calibration Requirements
§ 62.16015 What are the performance testing, monitoring, and
calibration requirements for compliance with the emission limits and
standards?

You must meet, as applicable, the performance testing requirements specified in paragraph (a) of this section, the monitoring requirements specified in paragraph (b) of this section, the air pollution control device inspections requirements specified in paragraph (c) of this section, and the bypass stack provisions specified in paragraph (d) of this section.

- (a) <u>Performance testing requirements</u>. (1) All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations, as specified in § 60.8(c) of this chapter. Emissions in excess of the emission limits or standards during periods of startup, shutdown, and malfunction are considered deviations from the applicable emission limits or standards.
- (2) You must document that the dry sludge burned during the performance test is representative of the sludge burned under normal operating conditions by:

- (i) Maintaining a log of the quantity of sewage sludge burned during the performance test by continuously monitoring and recording the average hourly rate that sewage sludge is fed to the incinerator.
- (ii) Maintaining a log of the moisture content of the sewage sludge burned during the performance test by taking grab samples of the sewage sludge fed to the incinerator for each 8 hour period that testing is conducted.
- (3) All performance tests must be conducted using the test methods, minimum sampling volume, observation period, and averaging method specified in Table 2 or 3 to this subpart.
- (4) Method 1 at 40 CFR part 60, appendix A, must be used to select the sampling location and number of traverse points.
- (5) Method 3A or 3B at 40 CFR part 60, appendix A-2, must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B at 40 CFR part 60, appendix A-2, must be used simultaneously with each method.
- (6) All pollutant concentrations must be adjusted to 7-percent oxygen using Equation 1 of this section:

$$C_{adj} = C_{meas}(20.9-7)/(20.9-80_2)$$
 (Eq. 1)

Where:

 C_{adj} = Pollutant concentration adjusted to 7 percent oxygen.

 C_{meas} = Pollutant concentration measured on a dry basis.

- (20.9 7) = 20.9 percent oxygen 7 percent oxygen (defined oxygen correction basis).
- 20.9 = Oxygen concentration in air, percent.
- $%O_2$ = Oxygen concentration measured on a dry basis, percent.
- (7) Performance tests must be conducted and data reduced in accordance with the test methods and procedures contained in this subpart unless the Administrator does one of the following.
- (i) Specifies or approves, in specific cases, the use of a method with minor changes in methodology.
- (ii) Approves the use of an equivalent method.
- (iii) Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance.
- (iv) Waives the requirement for performance tests because you have demonstrated by other means to the Administrator's satisfaction that the affected SSI unit is in compliance with the standard.
- (v) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph (a)(7) is construed to abrogate the Administrator's authority to require testing under section 114 of the Clean Air Act.
- (8) You must provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.

If after 30 days' notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, you must notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

- (9) You must provide, or cause to be provided, performance testing facilities as follows:
- (i) Sampling ports adequate for the test methods applicable to the SSI unit, as follows:
- (A) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures.
- (B) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- (ii) Safe sampling platform(s).
- (iii) Safe access to sampling platform(s).
- (iv) Utilities for sampling and testing equipment.
- (10) Unless otherwise specified in this subpart, each performance test must consist of three separate runs using the applicable test method. Each run must be conducted for the time and under the conditions specified in the applicable standard. Compliance with each

emission limit must be determined by calculating the arithmetic mean of the three runs. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond your control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

- (11) During each test run specified in paragraph (a)(1) of this section, you must operate your sewage sludge incinerator at a minimum of 85-percent of your maximum permitted capacity.
- (b) Continuous monitor requirements. You must meet the following requirements, as applicable, when using a continuous monitoring system to demonstrate compliance with the emission limits in Table 2 or 3 to this subpart. The option to use a continuous emissions monitoring system for hydrogen chloride, dioxins/furans, cadmium, or lead takes effect on the date a final performance specification applicable to hydrogen chloride, dioxins/furans, cadmium or lead is published in the Federal Register. If you elect to use a continuous emissions monitoring system instead of conducting annual performance testing, you must meet the requirements of paragraphs (b) (1) through (6) of this section. If you elect to use a continuous automated sampling system instead of conducting annual performance testing, you must meet the requirements of paragraph (b) (7) of this section. The

option to use a continuous automated sampling system for dioxins/furans takes effect on the date a final performance specification for such a continuous automated sampling system is published in the **Federal Register**.

- (1) You must notify the Administrator 1 month before starting use of the continuous emissions monitoring system.
- (2) You must notify the Administrator 1 month before stopping use of the continuous emissions monitoring system, in which case you must also conduct a performance test within prior to ceasing operation of the system.
- (3) You must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the emissions to the atmosphere in accordance with the following:
- (i) Section 60.13 of subpart A of part 60 of this chapter.
- (ii) The following performance specifications of appendix B of part 60 of this chapter, as applicable:
- (A) For particulate matter, Performance Specification 11 of appendix B of part 60 of this chapter.
- (B) For hydrogen chloride, Performance Specification 15 of appendix B of part 60 of this chapter.
- (C) For carbon monoxide, Performance Specification 4B of appendix B of part 60 of this chapter with spans appropriate to the applicable emission limit.
- (D) [Reserved]

- (E) For mercury, Performance Specification 12A of appendix B of part 60 of this chapter.
- (F) For nitrogen oxides, Performance Specification 2 of appendix B of part 60 of this chapter.
- (G) For sulfur dioxide, Performance Specification 2 of appendix B of part 60 of this chapter.
- (iii) For continuous emissions monitoring systems, the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of appendix F of part 60 of this chapter specified in paragraphs (b) (3) (iii) (A) through (G) of this section. For each pollutant, the span value of the continuous emissions monitoring system is two times the applicable emission limit, expressed as a concentration.
- (A) For particulate matter, Procedure 2 in appendix F of part 60 of this chapter.
- (B) For hydrogen chloride, Procedure 1 in appendix F of part 60 of this chapter except that the Relative Accuracy Test Audit requirements of Procedure 1 shall be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of Performance Specification 15 of appendix B of part 60 of this chapter.
- (C) For carbon monoxide, Procedure 1 in appendix F of part 60 of this chapter.
- (D) [Reserved]
- (E) For mercury, Procedures 5 in appendix F of part 60 of this

chapter.

- (F) For nitrogen oxides, Procedure 1 in appendix F of part 60 of this chapter.
- (G) For sulfur dioxide, Procedure 1 in appendix F of part 60 of this chapter.
- (iv) If your monitoring system has a malfunction or out-of-control period, you must complete repairs and resume operation of your monitoring system as expeditiously as possible.
- (4) During each relative accuracy test run of the continuous emissions monitoring system using the performance specifications in paragraph (b)(3)(ii) of this section, emission data for each regulated pollutant and oxygen (or carbon dioxide as established in paragraph (b)(5) of this section) must be collected concurrently (or within a 30- to 60-minute period) by both the continuous emissions monitoring systems and the test methods specified in paragraph (b)(4)(i) through (viii) of this section. Relative accuracy testing must be at representative operating conditions while the SSI unit is charging sewage sludge.
- (i) For particulate matter, Method 5 at 40 CFR part 60, appendix A-3, or Method 26A or 29 at 40 CFR part 60, appendix A-8, shall be used.
 (ii) For hydrogen chloride, Method 26 or 26A at 40 CFR part 60, appendix A-8, shall be used, as specified in Tables 2 and 3 to this subpart.
- (iii) For carbon monoxide, Method 10, 10A, or 10B at 40 CFR part 60,

appendix A-4, shall be used.

- (iv) For dioxins/furans, Method 23 at 40 CFR part 60, appendix A-7, shall be used.
- (v) For mercury, cadmium and lead, Method 29 at 40 CFR part 60, appendix A-8, shall be used. Alternatively for mercury, either Method 30B at 40 CFR part 60, appendix A-8, or ASTM D6784-02 (Reapproved 2008) (see paragraph (e) of this section).
- (vi) For nitrogen oxides, Method 7 or 7E at 40 CFR part 60, appendix A-4, shall be used.
- (vii) For sulfur dioxide, Method 6 or 6C at 40 CFR part 60, appendix A-4, or as an alternative ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus] must be used (see paragraph (e) of this section). For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for the inlet of the sulfur dioxide continuous emissions monitoring system should be no greater than 20-percent of the mean value of the method test data in terms of the units of the emission standard, or 5 parts per million dry volume absolute value of the mean difference between the method and the continuous emissions monitoring system, whichever is greater.
- (viii) For oxygen (or carbon dioxide as established in paragraph (b)(5) of this section), Method 3A or 3B at 40 CFR part 60, appendix A-2, or as an alternative ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], as applicable,

must be used (see paragraph (e) of this section).

- (5) You may request that compliance with the emission limits be determined using carbon dioxide measurements corrected to an equivalent of 7-percent oxygen. If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels must be established during the initial performance test according to the procedures and methods specified in paragraphs (b)(5)(i) through (iv) of this section. This relationship may be reestablished during subsequent performance tests.
- (i) The fuel factor equation in Method 3B at 40 CFR part 60, appendix A-2, must be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3A or 3B at 50 CFR part 60, appendix A-2, or as an alternative ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], as applicable, must be used to determine the oxygen concentration at the same location as the carbon dioxide monitor(see paragraph (e) of this section).
- (ii) Samples must be taken for at least 30 minutes in each hour.
- (iii) Each sample must represent a 1-hour average.
- (iv) A minimum of three runs must be performed.
- (6) You must operate the continuous monitoring system and collect data with the continuous monitoring system as follows:
- (i) You must collect data using the continuous monitoring system at all times the affected SSI unit is operating and at the intervals

specified in paragraph (b)(6)(ii) of this section, except for periods of monitoring system malfunctions that occur during periods specified in § 62.15995(a)(7)(i), repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). Any such periods that you do not collect data using the continuous monitoring system constitute a deviation from the monitoring requirements and must be reported in a deviation report.

- (ii) You must collect continuous emissions monitoring system data in accordance with \S 60.13(e)(2) of this chapter.
- (iii) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities must not be included in calculations used to report emissions or operating levels. Any such periods must be reported in a deviation report.

 (iv) Any data collected during periods when the monitoring system is out of control as specified in § 60.4880(a)(7)(i) of this chapter, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or control activities conducted during out-of-control periods must not be included in calculations used to report emissions or operating levels. Any such periods that do not coincide with a monitoring system malfunction as defined in § 62.16045, constitute a deviation

from the monitoring requirements and must be reported in a deviation report.

- (v) You must use all the data collected during all periods except those periods specified in paragraphs (b)(6)(iii) and (iv) of this section in assessing the operation of the control device and associated control system.
- (7) If you elect to use a continuous automated sampling system instead of conducting annual performance testing, you must:
- (i) Install, calibrate, maintain and operate a continuous automated sampling system according to the site-specific monitoring plan developed in § 60.58b(p)(1) through (6), (9), (10), and (q) of this chapter.
- (ii) Collect data according to § 60.58b(p)(5) of this chapter and paragraph (b)(6) of this section.
- (c) <u>Air pollution control device inspections</u>. You must conduct air pollution control device inspections that include, at a minimum, the following:
- (1) Inspect air pollution control device(s) for proper operation.
- (2) Generally observe that the equipment is maintained in good operating condition.
- (3) Develop a site-specific monitoring plan according to the requirements in § 62.15995. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under § 60.13(i) of this chapter.

- (d) <u>Bypass stack</u>. Use of the bypass stack at any time that sewage sludge is being charged to the SSI unit is an emissions standards deviation for all pollutants listed in Table 2 or 3 to this subpart. The use of the bypass stack during a performance test invalidates the performance test.
- (e) Incorporation by reference. These standards are incorporated by reference into this section with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. All approved material is available for inspection at the U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, (202) 272-0167, http://www.epa.gov. You may also inspect a copy at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr locations.html.
- (1) American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990 (Phone: 1-800-843-2763; Website: https://www.asme.org/).
- (i) ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus].
- (ii) [Reserved]
- (2) ASTM Int'l, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann

Arbor, MI 48106 (Phone: 1-877-909-2786; Website: http://www.astm.org/).

- (i) ASTM D6784-02 (Reapproved 2008) Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), approved April 1, 2008.
- (ii) [Reserved]
- (3) U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, (202) 272-0167, http://www.epa.gov.
- (i) OAQPS Fabric Filter Bag Leak Detection Guidance, EPA-454/R-98-015, September 1997.
- (ii) [Reserved]

§ 62.16020 What are the monitoring and calibration requirements for compliance with my operating limits?

- (a) You must install, operate, calibrate and maintain the continuous parameter monitoring systems according to the requirements in paragraphs (a)(1) and (2) of this section.
- (1) Meet the following general requirements for flow, pressure, pH and operating temperature measurement devices:
- (i) You must collect data using the continuous monitoring system at all times the affected SSI unit is operating and at the intervals specified in paragraph (a)(1)(ii) of this section, except for periods of monitoring system malfunctions that occur during periods specified defined in § 62.15995(a)(7)(i), repairs associated with monitoring

system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). Any such periods that you do not collect data using the continuous monitoring system constitute a deviation from the monitoring requirements and must be reported in a deviation report.

- (ii) You must collect continuous parameter monitoring system data in accordance with § 60.13(e)(2) of this chapter.
- (iii) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities must not be included in calculations used to report emissions or operating levels. Any such periods must be reported in your annual deviation report.
- (iv) Any data collected during periods when the monitoring system is out of control as specified in § 62.15995(a)(7)(i) must not be included in calculations used to report emissions or operating levels. Any such periods that do not coincide with a monitoring system malfunction, as defined in § 62.16045, constitute a deviation from the monitoring requirements and must be reported in a deviation report.
- (v) You must use all the data collected during all periods except those periods specified in paragraphs (a)(1)(iii) and (iv) of this section in assessing the operation of the control device and

associated control system.

- (vi) Record the results of each inspection, calibration and validation check.
- (2) Operate and maintain your continuous monitoring system according to your monitoring plan required under § 60.4880 of this chapter. Additionally:
- (i) For carrier gas flow rate monitors (for activated carbon injection), during the performance test conducted pursuant to § 60.4885 chapter, you must demonstrate that the system is maintained within ±5-percent accuracy, according to the procedures in appendix A to part 75 of this chapter.
- (ii) For carrier gas pressure drop monitors (for activated carbon injection), during the performance test conducted pursuant to \$ 60.4885 of this chapter, you must demonstrate that the system is maintained within ±5-percent accuracy.
- (b) You must operate and maintain your bag leak detection system in continuous operation according to your monitoring plan required under \$ 60.4880 of this chapter. Additionally:
- (1) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.
- (2) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (3) You must initiate procedures to determine the cause of every

alarm within 8 hours of the alarm, and you must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

- (i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media or any other condition that may cause an increase in particulate matter emissions.
- (ii) Sealing off defective bags or filter media.
- (iii) Replacing defective bags or filter media or otherwise repairing the control device.
- (iv) Sealing off a defective fabric filter compartment.
- (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.
- (vi) Shutting down the process producing the particulate matter emissions.
- (c) You must operate and maintain the continuous parameter monitoring systems specified in paragraphs (a) and (b) of this section in continuous operation according to your monitoring plan required under \$ 60.4880 of this chapter.
- (d) If your SSI unit has a bypass stack, you must install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack including date, time and duration.

Recordkeeping and Reporting

§ 62.16025 What records must I keep?

You must maintain the items (as applicable) specified in paragraphs (a) through (n) of this section for a period of at least 5 years. All records must be available on site in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator.

- (a) Date. Calendar date of each record.
- (b) Final control plan and final compliance. Copies of the final control plan and any additional notifications, reported under \$ 62.16030.
- (c) Operator training. Documentation of the operator training procedures and records specified in paragraphs (c)(1) through (4) of this section. You must make available and readily accessible at the facility at all times for all SSI unit operators the documentation specified in paragraph (c)(1) of this section.
- (1) Documentation of the following operator training procedures and information:
- (i) Summary of the applicable standards under this subpart.
- (ii) Procedures for receiving, handling and feeding sewage sludge.
- (iii) Incinerator startup, shutdown, and malfunction preventative and corrective procedures.
- (iv) Procedures for maintaining proper combustion air supply levels.
- (v) Procedures for operating the incinerator and associated air pollution control systems within the standards established under this

subpart.

- (vi) Monitoring procedures for demonstrating compliance with the incinerator operating limits.
- (vii) Reporting and recordkeeping procedures.
- (viii) Procedures for handling ash.
- (ix) A list of the materials burned during the performance test, if in addition to sewage sludge.
- (x) For each qualified operator and other plant personnel who may operate the unit according to the provisions of § 62.15945(a), the phone and/or pager number at which they can be reached during operating hours.
- (2) Records showing the names of SSI unit operators and other plant personnel who may operate the unit according to the provisions of \$ 62.15945(a), as follows:
- (i) Records showing the names of SSI unit operators and other plant personnel who have completed review of the information in paragraph (c)(1) of this section as required by § 62.15950(b), including the date of the initial review and all subsequent annual reviews.
- (ii) Records showing the names of the SSI unit operators who have completed the operator training requirements under § 62.15920, met the criteria for qualification under § 62.15930, and maintained or renewed their qualification under § 62.15935 or § 62.15940. Records must include documentation of training, including the dates of their initial qualification and all subsequent renewals of such

qualifications.

- (3) Records showing the periods when no qualified operators were accessible for more than 8 hours, but less than 2 weeks, as required in § 62.15945(a).
- (4) Records showing the periods when no qualified operators were accessible for 2 weeks or more along with copies of reports submitted as required in § 62.15945(b).
- (d) <u>Air pollution control device inspections</u>. Records of the results of initial and annual air pollution control device inspections conducted as specified in §§ 62.15990 and 62.16015(c), including any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the Administrator.
- (e) <u>Performance test reports</u>. (1) The results of the initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable.
- (2) Retain a copy of the complete performance test report, including calculations.
- (3) Keep a record of the hourly dry sludge feed rate measured during performance test runs as specified in § 62.16015(a)(2)(i).
- (4) Keep any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations, including a record of the moisture content measured as required in § 62.16015(a)(2)(ii) for each grab sample taken of the

sewage sludge burned during the performance test.

- (f) <u>Continuous monitoring data</u>. Records of the following data, as applicable:
- (1) For continuous emissions monitoring systems, all 1-hour average concentrations of particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans total mass basis, mercury, nitrogen oxides, sulfur dioxide, cadmium and lead emissions.
- (2) For continuous automated sampling systems, all average concentrations measured for mercury and dioxins/furans total mass basis at the frequencies specified in your monitoring plan.
- (3) For continuous parameter monitoring systems:
- (i) All 1-hour average values recorded for the following operating parameters, as applicable:
- (A) Combustion chamber operating temperature (or afterburner temperature).
- (B) If a wet scrubber is used to comply with the rule, pressure drop across each wet scrubber system and liquid flow rate to each wet scrubber used to comply with the emission limit in Table 2 or 3 to this subpart for particulate matter, cadmium or lead and scrubber liquid flow rate and scrubber liquid pH for each wet scrubber used to comply with an emission limit in Table 2 or 3 to this subpart for sulfur dioxide or hydrogen chloride.
- (C) If an electrostatic precipitator is used to comply with the rule, secondary voltage of the electrostatic precipitator collection plates

and secondary amperage of the electrostatic precipitator collection plates and effluent water flow rate at the outlet of the wet electrostatic precipitator.

- (D) If activated carbon injection is used to comply with the rule, sorbent flow rate and carrier gas flow rate or pressure drop, as applicable.
- (ii) All daily average values recorded for the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, monitored and calculated as specified in § 62.15960(f).
- (iii) If a fabric filter is used to comply with the rule, the date, time and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of operating time during each 6-month period that the alarm sounds, calculated as specified in § 62.16005.
- (iv) For other control devices for which you must establish operating limits under § 62.15965, you must maintain data collected for all operating parameters used to determine compliance with the operating limits, at the frequencies specified in your monitoring plan.
- (g) Other records for continuous monitoring systems. You must keep the following records, as applicable:
- (1) Keep records of any notifications to the Administrator in § 60.4915(h)(1) of this chapter of starting or stopping use of a continuous monitoring system for determining compliance with any

emissions limit.

- (2) Keep records of any requests under § 62.16015(b)(5) that compliance with the emission limits be determined using carbon dioxide measurements corrected to an equivalent of 7-percent oxygen.
- (3) If activated carbon injection is used to comply with the rule, the type of sorbent used and any changes in the type of sorbent used.
- (h) <u>Deviation reports</u>. Records of any deviation reports submitted under § 62.16030(e) and (f).
- (i) Equipment specifications and operation and maintenance

 requirements. Equipment specifications and related operation and

 maintenance requirements received from vendors for the incinerator,

 emission controls and monitoring equipment.
- (j) <u>Inspections</u>, calibrations and validation checks of monitoring <u>devices</u>. Records of inspections, calibration and validation checks of any monitoring devices as required under §§ 62.16015 and 62.16020.
- (k) Monitoring plan and performance evaluations for continuous monitoring systems. Records of the monitoring plans required under \$ 62.15995, and records of performance evaluations required under \$ 62.16000(b)(5).
- (1) <u>Less frequent testing</u>. If, consistent with § 62.16000(a)(3), you elect to conduct performance tests less frequently than annually, you must keep annual records that document that your emissions in the two previous consecutive years were at or below 75-percent of the applicable emission limit in Table 1 or 2 to this subpart, and

document that there were no changes in source operations or air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past 2 years.

- (m) <u>Use of bypass stack</u>. Records indicating use of the bypass stack, including dates, times and durations as required under § 62.16020(d).
- (n) If a malfunction occurs, you must keep a record of the information submitted in your annual report in § 62.16030(c)(16).

§ 62.16030 What reports must I submit?

You must submit the reports to the Administrator specified in paragraphs (a) through (i) of this section. See Table 6 to this subpart for a summary of these reports.

- (a) Final control plan and final compliance report. You must submit the following reports, as applicable:
- (1) A final control plan as specified in §§ 62.15875 and 62.15900.
- (2) You must submit your notification of achievement of submitting the final control plan and achieving final compliance no later than 10 business days after the compliance date as specified in \$\\$ 62.15885 and 62.15890.
- (3) If you fail to submit the final control plan and achieve final compliance, you must submit a notification to the Administrator postmarked within 10 business days after the compliance date, as specified in § 62.15895.
- (4) If you plan to close your SSI unit rather than comply with the federal plan, submit a closure notification as specified in

- \$ 62.15915.
- (b) <u>Initial compliance report</u>. You must submit the following information no later than 60 days following the initial performance test.
- (1) Company name, physical address and mailing address.
- (2) Statement by a responsible official, with that official's name, title and signature, certifying the accuracy of the content of the report.
- (3) Date of report.
- (4) The complete test report for the initial performance test results obtained by using the test methods specified in Table 2 or 3 to this subpart.
- (5) If an initial performance evaluation of a continuous monitoring system was conducted, the results of that initial performance evaluation.
- (6) The values for the site-specific operating limits established pursuant to §§ 62.15960 and 62.15965 and the calculations and methods, as applicable, used to establish each operating limit.
- (7) If you are using a fabric filter to comply with the emission limits, documentation that a bag leak detection system has been installed and is being operated, calibrated, and maintained as required by § 62.15960(b).
- (8) The results of the initial air pollution control device inspection required in § 62.15990, including a description of

repairs.

- (9) The site-specific monitoring plan required under § 62.15995, at least 60 days before your initial performance evaluation of your continuous monitoring system.
- (10) The site-specific monitoring plan for your ash handling system required under § 62.15995, at least 60 days before your initial performance test to demonstrate compliance with your fugitive ash emission limit.
- (c) Annual compliance report. You must submit an annual compliance report that includes the items listed in paragraphs (c) (1) through (16) of this section for the reporting period specified in paragraph (c) (3) of this section. You must submit your first annual compliance report no later than 12 months following the submission of the initial compliance report in paragraph (b) of this section. You must submit subsequent annual compliance reports no more than 12 months following the previous annual compliance report. (You may be required to submit similar or additional compliance information more frequently by the title V operating permit required in § 62.16035.)
- (1) Company name, physical address and mailing address.
- (2) Statement by a responsible official, with that official's name, title and signature, certifying the accuracy of the content of the report.
- (3) Date of report and beginning and ending dates of the reporting period.

- (4) If a performance test was conducted during the reporting period, the results of that performance test.
- (i) If operating limits were established during the performance test, include the value for each operating limit and, as applicable, the method used to establish each operating limit, including calculations.
- (ii) If activated carbon is used during the performance test, include the type of activated carbon used.
- (5) For each pollutant and operating parameter recorded using a continuous monitoring system, the highest average value and lowest average value recorded during the reporting period, as follows:
- (i) For continuous emission monitoring systems and continuous automated sampling systems, report the highest and lowest 24-hour average emission value.
- (ii) For continuous parameter monitoring systems, report the following values:
- (A) For all operating parameters except scrubber liquid pH, the highest and lowest 12-hour average values.
- (B) For scrubber liquid pH, the highest and lowest 3-hour average values.
- (6) If there are no deviations during the reporting period from any emission limit, emission standard or operating limit that applies to you, a statement that there were no deviations from the emission limits, emission standard or operating limits.

- (7) Information for bag leak detection systems recorded under \$ 62.16025(f)(3)(iii).
- (8) If a performance evaluation of a continuous monitoring system was conducted, the results of that performance evaluation. If new operating limits were established during the performance evaluation, include your calculations for establishing those operating limits.
- (9) If you elect to conduct performance tests less frequently as allowed in § 62.16000(a)(3) and did not conduct a performance test during the reporting period, you must include the dates of the last two performance tests, a comparison of the emission level you achieved in the last two performance tests to the 75-percent emission limit threshold specified in § 62.16000(a)(3), and a statement as to whether there have been any process changes and whether the process change resulted in an increase in emissions.
- (10) Documentation of periods when all qualified sewage sludge incineration unit operators were unavailable for more than 8 hours, but less than 2 weeks.
- (11) Results of annual air pollution control device inspections recorded under § 62.16025(d) for the reporting period, including a description of repairs.
- (12) If there were no periods during the reporting period when your continuous monitoring systems had a malfunction, a statement that there were no periods during which your continuous monitoring systems had a malfunction.

- (13) If there were no periods during the reporting period when a continuous monitoring system was out of control, a statement that there were no periods during which your continuous monitoring systems were out of control.
- (14) If there were no operator training deviations, a statement that there were no such deviations during the reporting period.
- (15) If you did not make revisions to your site-specific monitoring plan during the reporting period, a statement that you did not make any revisions to your site-specific monitoring plan during the reporting period. If you made revisions to your site-specific monitoring plan during the reporting period, a copy of the revised plan.
- (16) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 60.11(d), including actions taken to correct a malfunction.
- (d) Deviation reports. (1) You must submit a deviation report if:
- (i) Any recorded operating parameter level, based on the averaging time specified in Table 4 to this subpart, is above the maximum operating limit or below the minimum operating limit established

under this subpart.

- (ii) The bag leak detection system alarm sounds for more than 5percent of the operating time for the 6-month reporting period.
- (iii) Any recorded 24-hour block average emissions level is above the emission limit, if a continuous monitoring system is used to comply with an emission limit.
- (iv) There are visible emissions of combustion ash from an ash conveying system for more than 5-percent of any compliance test hourly observation period.
- (v) A performance test was conducted that deviated from any emission limit in Table 2 or 3 to this subpart.
- (vi) A continuous monitoring system was out of control.
- (vii) You had a malfunction (e.g., continuous monitoring system malfunction) that caused or may have caused any applicable emission limit to be exceeded.
- (2) The deviation report must be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data you collected during the second half of the calendar year (July 1 to December 31).
- (3) For each deviation where you are using a continuous monitoring system to comply with an associated emission limit or operating limit, report the items described in paragraphs (d)(3)(i) through (viii) of this section.

- (i) Company name, physical address and mailing address.
- (ii) Statement by a responsible official, with that official's name, title and signature, certifying the accuracy of the content of the report.
- (iii) The calendar dates and times your unit deviated from the emission limits, emission standards or operating limits requirements.
- (iv) The averaged and recorded data for those dates.
- (v) Duration and cause of each deviation from the following:
- (A) Emission limits, emission standards, operating limits and your corrective actions.
- (B) Bypass events and your corrective actions.
- (vi) Dates, times and causes for monitor downtime incidents.
- (vii) A copy of the operating parameter monitoring data during each deviation and any test report that documents the emission levels.

 (viii) If there were periods during which the continuous monitoring system malfunctioned or was out of control, you must include the following information for each deviation from an emission limit or operating limit:
- (A) The date and time that each malfunction started and stopped.
- (B) The date, time and duration that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.
- (C) The date, time and duration that each continuous monitoring system was out of control, including start and end dates and hours

and descriptions of corrective actions taken.

- (D) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction, during a period when the system as out of control or during another period.
- (E) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- (F) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes and other unknown causes.
- (G) A summary of the total duration of continuous monitoring system downtime during the reporting period, and the total duration of continuous monitoring system downtime as a percent of the total operating time of the SSI unit at which the continuous monitoring system downtime occurred during that reporting period.
- (H) An identification of each parameter and pollutant that was monitored at the SSI unit.
- (I) A brief description of the SSI unit.
- (J) A brief description of the continuous monitoring system.
- (K) The date of the latest continuous monitoring system certification or audit.
- (L) A description of any changes in continuous monitoring system,

processes, or controls since the last reporting period.

- (4) For each deviation where you are not using a continuous monitoring system to comply with the associated emission limit or operating limit, report the following items:
- (i) Company name, physical address and mailing address.
- (ii) Statement by a responsible official, with that official's name, title and signature, certifying the accuracy of the content of the report.
- (iii) The total operating time of each affected source during the reporting period.
- (iv) The calendar dates and times your unit deviated from the emission limits, emission standards or operating limits requirements.
- (v) The averaged and recorded data for those dates.
- (vi) Duration and cause of each deviation from the following:
- (A) Emission limits, emission standards, operating limits and your corrective actions.
- (B) Bypass events and your corrective actions.
- (vii) A copy of any performance test report that showed a deviation from the emission limits or standards.
- (viii) A brief description of any malfunction reported in paragraph (d)(1)(vii) of this section, including a description of actions taken during the malfunction to minimize emissions in accordance with \$ 60.11(d) of this chapter and to correct the malfunction.
- (e) Qualified operator deviation. (1) If all qualified operators are

not accessible for 2 weeks or more, you must take the two actions in paragraphs (e)(1)(i) and (ii) of this section.

- (i) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (e)(1)(i)(A) through (C) of this section.
- (A) A statement of what caused the deviation.
- (B) A description of actions taken to ensure that a qualified operator is accessible.
- (C) The date when you anticipate that a qualified operator will be available.
- (ii) Submit a status report to the Administrator every 4 weeks that includes the three items in paragraphs (e)(1)(ii)(A) through (C) of this section.
- (A) A description of actions taken to ensure that a qualified operator is accessible.
- (B) The date when you anticipate that a qualified operator will be accessible.
- (C) Request for approval from the Administrator to continue operation of the SSI unit.
- (2) If your unit was shut down by the Administrator, under the provisions of § 62.15945(b)(2)(i), due to a failure to provide an accessible qualified operator, you must notify the Administrator within five days of meeting § 62.15945(b)(2)(ii) that you are resuming operation.

- (f) Notification of a force majeure. If a force majeure is about to occur, occurs, or has occurred for which you intend to assert a claim of force majeure:
- (1) You must notify the Administrator, in writing as soon as practicable following the date you first knew, or through due diligence, should have known that the event may cause or caused a delay in conducting a performance test beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification must occur as soon as practicable.
- (2) You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in conducting the performance test beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which you propose to conduct the performance test.
- (g) Other notifications and reports required. You must submit other notifications as provided by § 60.7 of this chapter and as follows:
- (1) You must notify the Administrator 1 month before starting or stopping use of a continuous monitoring system for determining compliance with any emission limit.
- (2) You must notify the Administrator at least 30 days prior to any performance test conducted to comply with the provisions of this

subpart, to afford the Administrator the opportunity to have an observer present.

- (3) As specified in § 62.16015(a)(8), you must notify the Administrator at least 7 days prior to the date of a rescheduled performance test for which notification was previously made in paragraph (g)(2) of this section.
- (h) Report submission form. (1) Submit initial, annual and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.
- (2) Submit performance tests and evaluations according to paragraphs(h) (2) (i) and (ii) of this section.
- (i) Within 60 days after the date of completing each performance test (see §60.8 of this chapter) required by this subpart, you must submit the results of the performance test according to the method specified by either paragraph (h)(2)(i)(A) or (B) of this section.
- (A) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (http://www.epa.gov/ttn/chief/ert/index.html), at the time of the test, you must submit the results of the performance test to the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible

markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being transmitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disk, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph (h) (2) (i) (A).

- (B) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website, you must submit the results of the performance test to the Administrator at the appropriate address listed in §60.4 of this chapter.
- (ii) Within 60 days after the date of completing each CEMS performance evaluation (as defined in §63.2 of this chapter), you must submit the results of the performance evaluation according to the method specified by either paragraph (h)(2)(ii)(A) or (B) of this section.
- (A) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are

supported by the EPA's ERT as listed on the EPA's ERT website, you must submit the results of the performance evaluation via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT Web site. If you claim that some of the performance evaluation information being transmitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disk, flash drive, or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph (h)(2)(ii)(A).

- (B) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §60.4 of this chapter.
- (3) Changing report dates. If the Administrator agrees, you may change the semiannual or annual reporting dates. See § 60.19(c) of

this chapter for procedures to seek approval to change your reporting date.

Title V Operating Permits

§ 62.16035 Am I required to apply for and obtain a title V operating permit for my existing SSI unit?

Yes, if you are subject to an applicable EPA-approved and effective CAA section 111(d)/129 state or tribal plan or an applicable and effective federal plan, you are required to apply for and obtain a title V operating permit for your existing SSI unit unless you meet the relevant requirements for an exemption specified in § 62.15860.

§ 62.16040 When must I submit a title V permit application for my existing SSI unit?

- (a) If your existing SSI unit is not subject to an earlier permit application deadline, a complete title V permit application must be submitted on or before the earlier of the dates specified in paragraphs (a) (1) through (3) of this section. (See sections 129(e), 503(c), 503(d), and 502(a) of the Clean Air Act and 40 CFR 70.5(a) (1) (i) and 71.5(a) (1) (i)).
- (1) 12 months after the effective date of any applicable EPA-approved Clean Air Act section 111(d)/129 state or tribal plan.
- (2) 12 months after the effective date of any applicable federal plan.
- (3) March 21, 2014.

- (b) For any existing unit not subject to an earlier permit application deadline, the application deadline of 36 months after the promulgation of 40 CFR part 60, subpart MMMM, applies regardless of whether or when any applicable federal plan is effective, or whether or when any applicable Clean Air Act section 111(d)/129 state or tribal plan is approved by the EPA and becomes effective.
- (c) If your existing unit is subject to title V as a result of some triggering requirement(s) other than those specified in paragraphs (a) and (b) of this section (for example, a unit may be a major source or part of a major source), then your unit may be required to apply for a title V permit prior to the deadlines specified in paragraphs (a) and (b). If more than one requirement triggers a source's obligation to apply for a title V permit, the 12-month time frame for filing a title V permit application is triggered by the requirement which first causes the source to be subject to title V. (See section 503(c) of the Clean Air Act and 40 CFR 70.3(a) and (b), 70.5(a)(1)(i), 71.3(a) and (b), and 71.5(a)(1)(i).)
- (d) A "complete" title V permit application is one that has been determined or deemed complete by the relevant permitting authority under section 503(d) of the Clean Air Act and 40 CFR 70.5(a)(2) or 71.5(a)(2). You must submit a complete permit application by the relevant application deadline in order to operate after this date in compliance with federal law. (See sections 503(d) and 502(a) of the Clean Air Act and 40 CFR 70.7(b) and 71.7(b).)

Definitions

§ 62.16045 What definitions must I know?

Terms used but not defined in this subpart are defined in the Clean Air Act and \$ 60.2 of this chapter.

Administrator means:

- (1) For units covered by the federal plan, the Administrator of the EPA or his/her authorized representative (e.g., delegated authority).
- (2) For units covered by an approved state plan, the director of the state air pollution control agency or his/her authorized representative.

Affected source means a sewage sludge incineration unit as defined in \$ 62.16045.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

<u>Auxiliary fuel</u> means natural gas, liquefied petroleum gas, fuel oil or diesel fuel.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance or

other principle to monitor relative particulate matter loadings.

Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

<u>Calendar year</u> means 365 consecutive days starting on January 1 and ending on December 31.

Continuous automated sampling system means the total equipment and procedures for automated sample collection and sample recovery/analysis to determine a pollutant concentration or emission rate by collecting a single integrated sample(s) or multiple integrated sample(s) of the pollutant (or diluent gas) for subsequent on- or off-site analysis; integrated sample(s) collected are representative of the emissions for the sample time as specified by the applicable requirement.

Continuous emissions monitoring system means a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.

Continuous monitoring system (CMS) means a continuous emissions monitoring system, continuous automated sampling system, continuous parameter monitoring system or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by this subpart. The term refers to the total equipment used to sample and condition (if applicable), to analyze and to provide a permanent record of

emissions or process parameters.

Continuous parameter monitoring system means a monitoring system for continuously measuring and recording operating conditions associated with air pollution control device systems (e.g., operating temperature, pressure and power).

<u>Deviation</u> means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limit, operating limit, or operator qualification and accessibility requirements.
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

<u>Dioxins/furans</u> means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

Electrostatic precipitator or wet electrostatic precipitator means an air pollution control device that uses both electrical forces and, if applicable, water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

Existing sewage sludge incineration unit means a sewage sludge incineration unit the construction of which is commenced on or before October 14, 2010.

Fabric filter means an add-on air pollution control device used to

capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

<u>Fluidized bed incinerator</u> means an enclosed device in which organic matter and inorganic matter in sewage sludge are combusted in a bed of particles suspended in the combustion chamber gas.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions.

Modification means a change to an existing SSI unit later than September 21, 2011 and that meets one of two criteria:

- (1) The cumulative cost of the changes over the life of the unit exceeds 50-percent of the original cost of building and installing the SSI unit (not including the cost of land) updated to current costs (current dollars). To determine what systems are within the boundary of the SSI unit used to calculate these costs, see the definition of SSI unit.
- (2) Any physical change in the SSI unit or change in the method of operating it that increases the amount of any air pollutant emitted for which section 129 or section 111 of the Clean Air Act has established standards.

Modified sewage sludge incineration unit means an existing SSI unit that undergoes a modification, as defined in this section.

Multiple hearth incinerator means a circular steel furnace that contains a number of solid refractory hearths and a central rotating shaft; rabble arms that are designed to slowly rake the sludge on the hearth are attached to the rotating shaft. Dewatered sludge enters at the top and proceeds downward through the furnace from hearth to hearth, pushed along by the rabble arms.

Operating day means a 24-hour period between 12:00 midnight and the following midnight during which any amount of sewage sludge is combusted at any time in the SSI unit.

<u>Particulate matter</u> means filterable particulate matter emitted from SSI units as measured by Method 5 at 40 CFR part 60, appendix A-3, or Methods 26A or 29 at 40 CFR part 60, appendix A-8.

Power input to the electrostatic precipitator means the product of the test-run average secondary voltage and the test-run average secondary amperage to the electrostatic precipitator collection plates.

Process change means a significant permit revision, but only with respect to those pollutant-specific emission units for which the proposed permit revision is applicable, including but not limited to:

(1) A change in the process employed at the wastewater treatment facility associated with the affected SSI unit (e.g., the addition of tertiary treatment at the facility, which changes the method used for disposing of process solids and processing of the sludge prior to incineration).

(2) A change in the air pollution control devices used to comply with the emission limits for the affected SSI unit (e.g., change in the sorbent used for activated carbon injection).

Sewage sludge means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incineration unit or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

Sewage sludge feed rate means the rate at which sewage sludge is fed into the incinerator unit.

Sewage sludge incineration (SSI) unit means an incineration unit combusting sewage sludge for the purpose of reducing the volume of the sewage sludge by removing combustible matter. Sewage sludge incineration unit designs include fluidized bed and multiple hearth. AN SSI unit also includes, but is not limited to, the sewage sludge feed system, auxiliary fuel feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The SSI unit includes all ash handling systems connected to the bottom ash handling system. The combustion unit bottom ash system ends at the truck loading station or similar equipment that transfers the ash to final disposal. The SSI unit does not include air

pollution control equipment or the stack.

<u>Shutdown</u> means the period of time after all sewage sludge has been combusted in the primary chamber.

Solid waste means any garbage, refuse, sewage sludge from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded material, including solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, agricultural operations and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1342), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014).

<u>Standard conditions</u>, when referring to units of measure, means a temperature of 68 °F (20 °C) and a pressure of 1 atmosphere (101.3 kilopascals).

Startup means the period of time between the activation, including the firing of fuels (e.g., natural gas or distillate oil), of the system and the first feed to the unit.

Toxic equivalency means the product of the concentration of an individual dioxin isomer in an environmental mixture and the corresponding estimate of the compound-specific toxicity relative to

tetrachlorinated dibenzo-p-dioxin, referred to as the toxic equivalency factor for that compound. Table 5 to this subpart lists the toxic equivalency factors.

Wet scrubber means an add-on air pollution control device that utilizes an aqueous or alkaline scrubbing liquid to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

You means the owner or operator of an affected SSI unit.

Delegation of Authority

§ 62.16050 What authorities will be retained by the EPA Administrator?

The authorities that will not be delegated to state, local, or tribal agencies are specified in paragraphs (a) through (g) of this section.

- (a) Approval of alternatives to the emission limits and standards in Tables 2 and 3 to this subpart and operating limits established under §62.15965 or §62.15985.
 - (b) Approval of major alternatives to test methods.
 - (c) Approval of major alternatives to monitoring.
- (d) Approval of major alternatives to recordkeeping and reporting.
 - (e) The requirements in §62.15965.
 - (f) The requirements in \$62.15945 (b) (2).
 - (g) Performance test and data reduction waivers under §60.8(b)

of this chapter.

Table 1 to Subpart LLL of Part 62—Compliance Schedule for Existing Sewage Sludge Incineration Units

Comply with	
requirements	By this date
	March 21, 2016, for all units except East Bank Wastewater Treatment Plant, New Orleans, Louisiana, and Bayshore Regional Wastewater Treatment Plant in
2-Final compliance	Union Beach, Monmouth County, NJ.
	For East Bank Wastewater Treatment Plant, New
	Orleans, Louisiana, and Bayshore Regional Wastewater
	Treatment Plant in Union Beach, Monmouth County, NJ, March 21, 2017.

Table 2 to Subpart LLL of Part 62-Emission Limits and Standards for Existing Fluidized Bed Sewage Sludge Incineration Units

		Using these averaging methods and minimum	And determining
For the air	You must meet this	sampling volumes or	compliance using
pollutant	emission limit ¹	durations	this method
Particulate	18 milligrams per	3-run average (collect	Performance test
matter	dry standard cubic	a minimum volume of 1	(Method 5 at 40
	meter	dry standard cubic	CFR part 60,
		meters sample per run)	appendix A-3;
			Method 26A or
			Method 29 at 40
			CFR part 60,
			appendix A-8).

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For the air pollutant Hydrogen chloride	You must meet this emission limit ¹ 0.51 parts per million by dry volume	Using these averaging methods and minimum sampling volumes or durations 3-run average (Collect a minimum volume of 1 dry standard cubic meters per run)	And determining compliance using this method Performance test (Method 26A at 40 CFR part 60, appendix A-8).
Carbon monoxide	64 parts per million by dry volume	3-run average (collect sample for a minimum duration of one hour per run)	Performance test (Method 10, 10A, or 10B at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis); or	1.2 nanograms per dry standard cubic meter(total mass basis); or	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis) ²	0.10 nanograms per dry standard cubic meter (toxic equivalency basis)		
Mercury	0.037 milligrams per dry standard cubic meter	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008) ³ , collect a minimum volume of 1 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A-8)	Performance test (Method 29 at 40) CFR part 60, appendix A-8; Method 30B at 40) CFR part 60, appendix A-8; or ASTM D6784-02 (Reapproved 2008).3,5

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For the air pollutant Oxides of nitrogen	You must meet this emission limit ¹ 150 parts per million by dry volume	Using these averaging methods and minimum sampling volumes or durations 3-run average (Collect sample for a minimum duration of one hour per run)	And determining compliance using this method Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Sulfur dioxide	15 parts per million by dry volume	3-run average (For Method 6, collect a minimum volume of 60 liters per run. For Method 6C, collect sample for a minimum duration of one hour per run)	Performance test (Method 6 or 6C at 40 CFR part 40, appendix A-4; or ANSI/ASME PTC- 19.10-1981.3,4
Cadmium	0.0016 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use GFAAS or ICP/MS for the analytical finish.
Lead	0.0074 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters sample per run)	Performance test (Method 29 at 40 CFR part 60, appendix A-8. Use GFAAS or ICP/MS for the analytical finish.

		Using these averaging	
		methods and minimum	And determining
For the air	You must meet this	sampling volumes or	compliance using
pollutant	emission $limit^1$	durations	this method
Fugitive	Visible emissions	Three 1-hour	Visible emission
emissions from	of combustion ash	observation periods	test (Method 22
ash handling	from an ash		at 40 CFR part
	conveying system		60, appendix A-
	(including conveyor		7).
	transfer points)		
	for no more than 5		
	percent of any		
	compliance test		
	hourly observation		
	period		

¹ All emission limits are measured at 7-percent oxygen, dry basis at standard conditions.

 $^{^2}$ You have the option to comply with either the dioxin/furan emission limit on a total mass basis or the dioxin/furan emission limit on a toxic equivalency basis.

The Director of the **Federal Register** approves these incorporations by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may inspect these standards at U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, (202) 272-0167, http://www.epa.gov. You may also inspect a copy at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: {HYPERLINK "http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_lo cations.html"}.

⁴ ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]. American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990 (Phone: 1-800-843-2763; Website: https://www.asme.org/).

⁵ ASTM D6784-02 (Reapproved 2008) Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-

Fired Stationary Sources (Ontario Hydro Method), [approved April 1, 2008]. ASTM International, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106(Phone: 1-877-909-2786; Website: http://www.astm.org/).

Table 3 to Subpart LLL of Part 62-Emission Limits and Standards for Existing Multiple Hearth Sewage Sludge Incineration Units

		Using these averaging	
		methods and minimum	And determining
For the air	You must meet this	sampling volumes or	compliance using
pollutant	emission limit ¹	durations	this method
Particulate	80 milligrams per	3-run average (collect	Performance test
matter	dry standard cubic	a minimum volume of	(Method 5 at 40
	meter	0.75 dry standard	CFR part 60,
		cubic meters per run)	appendix A-3;
			Method 26A or
			Method 29 at 40
			CFR part 60,
			appendix A-8).
Hydrogen	1.2 parts per	3-run average (For	Performance test
chloride	million by dry	Method 26, collect a	(Method 26 or 26A
	volume	minimum volume of 200	at 40 CFR part
		liters per run. For	60, appendix A-
		Method 26A, collect a	8).
		minimum volume of 1	
		dry standard cubic	
		meters per run)	
Carbon monoxide	3,800 parts per	3-run average (collect	Performance test
	million by dry	sample for a minimum	(Method 10, 10A,
	volume	duration of one hour	or 10B at 40 CFR
	v o i unic	per run)	part 60, appendix
		her raii)	A-4).
			A-4).

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For the air pollutant Dioxins/furans (total mass	You must meet this emission limit ¹ 5.0 nanograms per dry standard cubic	Using these averaging methods and minimum sampling volumes or durations 3-run average (collect a minimum volume of 1	And determining compliance using this method Performance test (Method 23 at 40
basis)	meter; or 0.32 nanograms per	dry standard cubic meters per run)	CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis) ²	dry standard cubic meter		
Mercury	meter	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008) ³ , collect a minimum volume of 1 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A-8)	Performance test (Method 29 at 40) CFR part 60, appendix A-8; Method 30B at 40 CFR part 60, appendix A-8; or ASTM D6784-02 (Reapproved 2008).3,5
Oxides of nitrogen	220 parts per million by dry volume	3-run average (Collect sample for a minimum duration of one hour per run)	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A- 4).

		Using these averaging	
		methods and minimum	And determining
For the air	You must meet this	sampling volumes or	compliance using
pollutant	emission limit ¹	durations	this method
Sulfur dioxide	26 parts per	3-run average (For	Performance test
	million by dry	Method 6, collect a	(Method 6 or 6C
	volume	minimum volume of 200	at 40 CFR part
		liters per run. For	40, appendix A-4;
		Method 6C, collect	or ANSI/ASME PTC
		sample for a minimum	19.10-1981.3,4
		duration of one hour	
		per run)	
Cadmium	0.095 milligrams	3-run average (collect	Performance test
Cadillain	per dry standard	a minimum volume of 1	(Method 29 at 40
	cubic meter	dry standard cubic	CFR part 60,
	0.000	meters per run)	appendix A-8).
		_	
Lead		3-run average (collect	
	dry standard cubic	a minimum volume of 1	(Method 29 at 40
	meter	dry standard cubic	CFR part 60,
		meters per run)	appendix A-8.
Fugitive	Visible emissions	Three 1-hour	Visible emission
emissions from	of combustion ash	observation periods	test (Method 22
ash handling	from an ash		at 40 CFR part
	conveying system		60, appendix A-
	(including conveyor		7).
	transfer points)		
	for no more than 5		
	percent of any		
	compliance test		
	hourly observation		
	period		

 $^{^{1}}$ All emission limits are measured at 7-percent oxygen, dry basis at standard conditions.

 $^{^{2}}$ You have the option to comply with either the dioxin/furan emission limit

on a total mass basis or the dioxin/furan emission limit on a toxic equivalency basis.

The Director of the **Federal Register** approves these incorporations by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may inspect these standards at U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, (202) 272-0167, http://www.epa.gov. You may also inspect a copy at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_loc ations.html.

Table 4 to Subpart LLL of Part 62-Operating Parameters for Existing Sewage Sludge Incineration Units 1

		And monitor using these minimum frequencies				
	establish these			Data averaging		
For these operating parameters	· F		•	period for compliance		
All sewage sludge incineration units						

⁴ ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]. American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990 (Phone: 1-800-843-2763; Website: https://www.asme.org/).

⁵ ASTM D6784-02 (Reapproved 2008) Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), [approved April 1, 2008]. ASTM International, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106 (Phone: 1-877-909-2786; Website: http://www.astm.org/).

		And monitor using these minimum			
	You must	frequencies			
	establish these			Data averaging	
For these operating	operating	Data	Data	period for	
parameters	limits	measurement	recording ²	compliance	
				10.1	
Combustion chamber	Minimum	Continuous	Every 15	12-hour block.	
operating	combustion		minutes		
temperature (not	chamber				
required if	operating				
afterburner	temperature				
temperature is	or afterburner				
monitored)	temperature				
Fugitive emissions	Site-specific	Not	No	Not applicable	
from ash handling	operating	applicable	applicable	11	
	requirements				
	1		IL	<u> </u>	
Scrubber	<u> </u>	<u> </u>	10	<u> </u>	
Pressure drop across	Minimum	Continuous	Every 15	12-hour block	
each wet scrubber	pressure drop		minutes		
Scrubber liquid flow	Minimum flow	Continuous	Every 15	12-hour block	
rate	rate		minutes		
Scrubber liquid pH	Minimum pH	Continuous	Every 15	3-hour block	
		001102110000	minutes		
			III III CCS		
Fabric Filter					
Alarm time of the	Maximum alarm time of the bag leak detection system				
bag leak detection	alarm (this operating limit is provided in §60.4850 and				
system alarm	is not established on a site-specific basis)				

		And monitor using these minimum		
	You must	frequencies	- II	<u> </u>
	establish these			Data averaging
For these operating	operating	Data	Data	period for
parameters	limits	measurement	recording ²	compliance
Electrostatic precip	itator	1	,	,
Secondary voltage of	Minimum power	Continuous	Hourly	12-hour block
the electrostatic	input to the	Concinacas	lio di i y	12 Hour brock
precipitator	electrostatic			
collection plates	precipitator			
Totalogian Praces	collection			
Secondary amperage	plates			
of the electrostatic	Piaces			
precipitator				
collection plates				
Effluent water flow	Minimum	Hourly	Hourly	12-hour block
rate at the outlet	effluent water	_	_	
of the electrostatic	flow rate at			
precipitator	the outlet of			
	the			
	electrostatic			
	precipitator			
Activated carbon inje	ection	1	<u>, </u>	
Me 19 20 20 20 20 20 20 20 20 20 20 20 20 20	Minaiman		II a]	12 hour block
Mercury sorbent	Minimum mercury	Hourly	Hourly	12-hour block
injection rate	sorbent			
	injection rate			
Dioxin/furan sorbent	Minimum			
injection rate	dioxin/furan			
	sorbent			
	injection rate			

		And monitor using these minimum			
	You must	frequencies	1	1	
	establish these			Data averaging	
For these operating	operating	Data	Data	period for	
parameters	limits	measurement	recording ²	compliance	
Carrier gas flow	Minimum carrier	Continuous	Every 15	12-hour block	
rate or carrier gas	gas flow rate		minutes		
pressure drop	or minimum				
	carrier gas				
	pressure drop				
Afterburner					
Temperature of the	Minimum	Continuous	Every 15	12-hour block	
afterburner	temperature of		minutes		
combustion chamber	the afterburner				
	combustion				
	chamber				

¹ As specified in §62.15985, you may use a continuous emissions monitoring system or continuous automated sampling system in lieu of establishing certain operating limits.

Table 5 to Subpart LLL of Part 62-Toxic Equivalency Factors

Dioxin/furan isomer	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	1
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1

² This recording time refers to the minimum frequency that the continuous monitor or other measuring device initially records data. For all data recorded every 15 minutes, you must calculate hourly arithmetic averages. For all parameters, you use hourly averages to calculate the 12-hour or 3-hour block average specified in this table for demonstrating compliance. You maintain records of 1-hour averages.

Dioxin/furan isomer	Toxic equivalency factor
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.0003
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.3
1,2,3,7,8-pentachlorinated dibenzofuran	0.03
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.0003

Table 6 to Subpart LLL of Part 62—Summary of Reporting Requirements for Existing Sewage Sludge Incineration Units $^{\! 1}$

Report	Due date	Contents	Reference
Final control plan and final compliance report	No later than 10 business days after the compliance date	1. Final control plan including air pollution control device descriptions, process changes, type of waste to be burned, and the maximum design sewage sludge burning capacity 2. Notification of any failure to submit the final control plan and	

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Report	Due date	Contents	Reference
		achieve final compliance 3. Notification of any closure	
Initial compliance report	No later than 60 days following the initial performance test	1. Company name and address 2. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report 3. Date of report 4. Complete test report for the initial performance test 5. Results of CMS ² performance evaluation 6. The values for the site-specific operating limits and the calculations and methods used to establish each operating limit 7. Documentation of installation of bag leak detection system for fabric filter 8. Results of initial air pollution control device inspection, including a description of repairs 9. The site-specific monitoring plan required under \$62.15995	

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Report	Due date	Contents	Reference
		10. The site- specific monitoring plan for your ash handling system required under §62.15995	
Annual compliance report	No later than 12 months following the submission of the initial compliance report; subsequent reports are to be submitted no more than 12 months following the previous report	1. Company name and address 2. Statement and signature by responsible official 3. Date and beginning and ending dates of report 4. If a performance test was conducted during the reporting period, the results of the test, including any new operating limits and associated calculations and the type of activated carbon used, if applicable 5. For each pollutant and operating parameter recorded using a CMS, the highest recorded 3-hour average and the lowest recorded 3-hour average, as applicable 6. If no deviations from emission limits, emission standards, or operating limits occurred, a statement that no deviations occurred 7. If a fabric filter is used, the date, time, and duration	

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Report	Due date	Contents	Reference
		of alarms 8. If a performance evaluation of a CMS was conducted, the results, including any new operating limits and their associated calculations 9. If you met the requirements of \$62.16000(a)(3) and did not conduct a performance test, include the dates of the last three performance tests, a comparison to the 50 percent emission limit threshold of the emission level achieved in the last three performance tests, and a statement as to whether there have been any process changes 10. Documentation of periods when all qualified SSI unit operators were unavailable for more than 8 hours but less than 2 weeks 11. Results of annual pollutions control device inspections, including description of repairs 12. If there were no periods during which your CMSs had malfunctions, a statement that there were no	

Report	Due date	Contents	Reference
		periods during which your CMSs had malfunctions 13. If there were no periods during which your CMSs were out of control, a statement that there were no periods during which your CMSs were out of control 14. If there were no operator training deviations, a statement that there were no such deviations 15. Information on monitoring plan revisions, including a copy of any revised monitoring plan	
Deviation report (deviations from emission limits, emission standards, or operating limits, as specified in \$62.16030(e)(1))	By August 1 of a calendar year for data collected during the first half of the calendar year; by February 1 of a calendar year for data collected during the second half of the calendar year	If using a CMS: 1. Company name and address 2. Statement by a responsible official 3. The calendar dates and times your unit deviated from the emission limits or operating limits 4. The averaged and recorded data for those dates 5. Duration and cause of each deviation 6. Dates, times, and causes for monitor downtime incidents 7. A copy of the operating parameter	

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Report	Due date	Contents	Reference
Report	Due date	monitoring data during each deviation and any test report that documents the emission levels 8. For periods of CMS malfunction or when a CMS was out of control, you must include the information specified in \$62.16030(d)(3)(vii i) If not using a CMS: 1. Company name and address 2. Statement by a responsible official 3. The total operating time of each affected SSI unit 4. The calendar dates and times your unit deviated from the emission limits, emission standard, or operating limits 5. The averaged and recorded data for those dates 6. Duration and cause of each deviation 7. A copy of any performance test report that showed a deviation from the emission limits or standards	
		8.A brief description of any malfunction, a description of actions taken during the malfunction to	

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Report	Due date	Contents	Reference
		and corrective action taken	
Notification of qualified operator deviation (if all qualified operators are not accessible for 2 weeks or more)	Within 10 days of deviation	1. Statement of cause of deviation 2. Description of actions taken to ensure that a qualified operator will be available 3. The date when a qualified operator will be accessible	§62.16030(e)
Notification of status of qualified operator deviation	Every 4 weeks following notification of deviation	 Description of actions taken to ensure that a qualified operator is accessible The date when you anticipate that a qualified operator will be accessible Request for approval to continue operation 	§62.16030(e)
Notification of resumed operation following shut down (due to qualified operator deviation and as specified in § 62.15945(b)(2)(i)	Within five days of obtaining a qualified operator and resuming operation	1. Notification that you have obtained a qualified operator and are resuming operation	§62.16030(e)
Notification of a force majeure	As soon as practicable following the date you first knew, or through due diligence should have known that	1. Description of the force majeure event 2. Rationale for attributing the delay in conducting the performance test beyond the regulatory deadline to the force	

D	D	Q	D - 6
Report	Due date	Contents	Reference
	the event may	majeure	
	cause or caused a	3. Description of the measures taken or	
	delay in	to be taken to	
	conducting a	minimize the delay 4. Identification of	
	performance test	the date by which	
	beyond the	you propose to conduct the	
	regulatory	performance test	
	deadline; the		
	notification must		
	occur before the		
	performance test		
	deadline unless		
	the initial force		
	majeure or a		
	subsequent force		
	majeure event		
	delays the notice,		
	and in such cases,		
	the notification		
	must occur as soon		
	as practicable		
Notification of	1 month before	1. Intent to start or	\$62,16030 (a)
intent to start or		stop use of a CMS	5 (9,
stop use of a	stopping use of a		
CMS	CMS		
		1. Intent to conduct	
Notification of	At least 30 days	a performance test	
intent to conduct	prior to the	to comply with	
a performance test	performance test	this subpart	
Notification of	At least 7 days	1. Intent to conduct	
intent to conduct	prior to the date	a rescheduled performance test	
a rescheduled	of a rescheduled	to comply with	
performance test	performance test	this subpart	

 $^{^{}m 1}$ This table is only a summary, see the referenced sections of the rule for

the complete requirements.

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 $^{^{2}}$ CMS means continuous monitoring system.